Agenda

• Introduction
• Explanation of Approaches, Terminology, and Tools
• Charter Overview
• Process Mapping
Our Team Environment

• Interactive and participative

• Ask questions for clarity – feel comfortable with concepts and supportive of approach

• Open to new ideas and experiences

• Learning for application – for this event and other areas of your work

• Ridiculous and cliché, but let’s have a little fun!
Purpose

1. Prepare team members to actively participate in kaizen event

Next Steps:

1. Finalize the charter and partner with management
2. Identify any homework items that need to be completed
Parking Lot
Continuous Improvement Initiative

Who We Are

We are a City Manager initiative focused on improving internal and external service delivery. Continuous Improvement uses data, process improvement frameworks, training, and other tools to maximize the value provided to both customers and the public.
You may have heard about...

- Continuous Improvement
- Lean
- TOC
- TQM
- HPO
- Six Sigma
Who’s using Lean?

- State of Washington
- 70% of Manufacturers
- Seattle Children’s Hospital
- Port of Seattle
- King County
- Issaquah
- Redmond
- University of Washington
- Toyota
- Boeing
- Virginia Mason
- Group Health
- Boeing
- Port of Seattle
- State of Washington
- Issaquah
- King County
- Redmond
- University of Washington
- Toyota
- Boeing
- Virginia Mason
- Group Health
- Boeing
- Port of Seattle
- State of Washington
- Issaquah
- King County
What Makes This Different?

Focus on rapid change and immediate implementation.

Customer focus and active involvement.

Dedicated resources.

Data driven decision making.

Trust and accountability.

Emphasis on doing over planning or reporting.

Frontline workforce asked to improve processes.

Focus on priority projects.

Citywide collaboration and perspective.
APPROACH
Key Beliefs

• Employees do the best they can in the system they work in – they want to do a good job!

• There is waste in every process so there is room for improvement in the way we do our work.

• In order to improve we must look at what we do and how we do it.
Approach Principles

- Systems, not Silos
- Tops Down; Bottoms Up
- Processes First
- Value from the Customer’s Perspective

Process Principles

- Iterate and Experiment
- Slow Down to Go Fast
- Measure and Prove it
- Identify and Eliminate Waste
Value for the Customer

The customer must recognize the task as important.

The task is done right the first time.

The product or service must physically change or transform.
DEFINITIONS
Lean

The systematic elimination of waste.
Waste

Any action, process or product that adds cost, without adding value as perceived by the customer.
Customer

The internal or external recipient of any output (or final product) throughout the process.
Output

Information or materials after a task is performed in a process; input for the next task (unless a final product).
Process
Any step or series of steps that transforms an input into an output by adding value.
Value

An action has value if:

1. The customer considers the task important (they would be willing to pay for that action)
2. The input physically changes
3. The task is done right the first time
Input

Information or materials required to perform the next task in a process. Provided by a supplier.
Supplier

The internal or external provider of any input (or final product) throughout the process.
Supplier ➔ Input ➔ Process ➔ Value ➔ Output ➔ Customer

SIPOC

CONTINUOUS IMPROVEMENT
Stakeholders versus Customers

**Stakeholders**
- Internal or external to the City
- Vested interest in the outcomes (not the output) of a process

**Customers**
- Internal or external to the City
- Direct recipients of an output
- Determine whether or not a step in a process has value
Exercise – Stakeholders, Customers, Suppliers

Think about one processes: Identify the stakeholders, customers, and suppliers

Ask yourself the following:

• What do they need from the process?
• Who gives it to them?
• Where are the gaps?
Voice of Customer Tools

- Focus Groups
- Surveys/Interviews
- Point of Use Observations

Voice of the Customer
8 Wastes

- Waiting
- Overproduction
- Over processing
- Defects
- Motion
- Inventory
- Transportation
- Unused Employee Creativity (fun)
Waiting

Idle time created when material, information, people, or equipment is not ready; time when no value is added to the product or service.
Overproduction

Producing more than is required at that time by your customers. Leads to other forms of waste. Also, consider useless-production: choosing or continuing to produce products, reports, or services that do not add value.
Over processing
Performing non-value added activities to change products or services beyond what the customer expects and is willing to pay for. Often the result of inefficient attempts to mitigate risks or forgetting what the customer values.
Defects

Mistakes; unusable products that result from variations in the process; errors in documents or reports; activities that must be reworked before the product or service meets the customer’s requirements.
Motion

Unnecessary movement of people to complete the task. This may include travelling or motions such as bending, reaching, and lifting.
Inventory

Money and resources tied up in supplies, raw materials, work in progress, or finished products beyond what is necessary for short term operations.
Transportation

Unnecessary movement of materials (compared to motion which is the unnecessary movement of people). Moving supplies more often or further than should be necessary to complete the job.
Unused Employee Creativity

Underutilization of employees’ knowledge, energy, or talent. Lost time, ideas, productivity and improvements - often as a result of not empowering employees or asking them to be creative.
# Waste Activity

What process would you like to streamline/improve in your department?

<table>
<thead>
<tr>
<th>Customers</th>
<th>Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Requirements:</td>
<td>• Requirements:</td>
</tr>
<tr>
<td>• Gaps:</td>
<td>• Gaps:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>W</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>I</td>
</tr>
<tr>
<td>O</td>
<td>T</td>
</tr>
<tr>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>
Define D
Measure M
Analyze A
Improve I
Control C

“duh – may – ick”
## Process Mapping

### Purpose
To understand all of the steps involved in a process and to analyze each step for value according to the customer’s perspective. Directly attacks and eliminates waste to free up capacity in an organization.

### Execution
- Hands on process requiring executive support and commitment
- Begin with understanding of customer needs
- Require input from those closest to the work

### Time

<table>
<thead>
<tr>
<th>Time</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies based on scale of project</td>
<td>To understand all of the steps involved in a process and to analyze each step for value according to the customer’s perspective. Directly attacks and eliminates waste to free up capacity in an organization.</td>
</tr>
</tbody>
</table>

**Requires 3 Meetings:**
1. Map current state
2. Analyze current state
3. Map future state
Detailed Process Map
Value Added Analysis

Value Added

• The customer must recognize the task as important.
• The product or service must physically change or transform.
• The task is done right the first time.

Non Value Added

• Waste. A process step that adds no value to the product or service.
• Does the customer want to pay for this?

Non Value Added, but Required

• A process step that adds no value to the product but is currently required to produce the product or service. A required law, regulation, rule etc. Internal or external.
SIPOC

Time
Approx. 1 hour

Purpose
Identifies the key supplier and customer relationships within the organization. Focusses on understanding the purpose of a process rather than the process itself.

Execution
• Excellent starting place for lean thinking
• Require coordination between departments
• Identify gaps between inputs/outputs that are received/produced versus what’s needed
**What is a SIPOC?**

A SIPOC is a high-level view of a process. It stands for Suppliers, Inputs, Process, Outputs, and Customers:

- **Supplier**: Person/Organization that provides Input to a Process.
- **Input**: Resource that is added to a Process by a Supplier.
- **Process**: Series of steps where an Input converts to an Output.
- **Output**: Resource that is the result of a Process.
- **Customer**: Person/Organization that receives products or services.

---

**goLeanSixSigma**

**http://GoLeanSixSigma.com**

<table>
<thead>
<tr>
<th>SUPPLIERS</th>
<th>INPUTS</th>
<th>PROCESS</th>
<th>OUTPUTS</th>
<th>CUSTOMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Staff</td>
<td>• Internal Data</td>
<td>• COMPLETE RESERVE POLICY (DEFINE USES OF EXCESS RESERVES)</td>
<td>• 2015 Appropriations</td>
<td>• Citizens</td>
</tr>
<tr>
<td>• Citizens</td>
<td>• External Data</td>
<td>• REVIEW AND DECIDE ON QUICK OPERATIONAL DECISIONS</td>
<td>• Sustainable Budget</td>
<td>• Elected Officials</td>
</tr>
<tr>
<td>• Elected Officials</td>
<td>• Historical Data</td>
<td>• REVIEW DISCUSSION ITEMS</td>
<td>• Reserve Policy</td>
<td>• Staff</td>
</tr>
<tr>
<td>• Financial Professionals</td>
<td>• Demographic Data</td>
<td>• UNDERSTAND CHANGES IN REVISED OPERATIONS PLAN</td>
<td>• Reliable forecast model</td>
<td>• Media</td>
</tr>
<tr>
<td>• Vendors</td>
<td>• Legislative Info</td>
<td>• REVIEW/PRIORITY CAPITAL AND EXPLORE ALTERNATIVES</td>
<td>• Capital Improvement Plan</td>
<td>• Lending Institutions</td>
</tr>
<tr>
<td>• Government Entities</td>
<td>• Regulatory Info</td>
<td></td>
<td>• Know “what is spendable”</td>
<td>• Businesses</td>
</tr>
<tr>
<td>• Stakeholders</td>
<td>• Performance Data</td>
<td></td>
<td>• List of Risks</td>
<td>• Developers</td>
</tr>
<tr>
<td>• Businesses</td>
<td>• Resident Input</td>
<td></td>
<td>• Communication Plan</td>
<td>• Future Citizens</td>
</tr>
<tr>
<td></td>
<td>• Funding for Studies</td>
<td></td>
<td>• Look at what is Bondable</td>
<td>• Other Communities</td>
</tr>
<tr>
<td></td>
<td>• 2/17 Draft Financial Plan</td>
<td></td>
<td>• List of ‘must haves’</td>
<td>• Stakeholders/Service s Users</td>
</tr>
<tr>
<td></td>
<td>• Computations</td>
<td></td>
<td>• Consensus – Something to Adopt</td>
<td>• Community Groups</td>
</tr>
<tr>
<td></td>
<td>• Assumptions</td>
<td></td>
<td>• Validation of City Services</td>
<td>• State/Federal Govt.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Quick Operational Answers</td>
<td>• County</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Timeline of Deliverables</td>
<td>• Schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Desired Level of Services</td>
<td>• MORPC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Website Status Tracker</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 5 year Plan</td>
<td></td>
</tr>
</tbody>
</table>

---

**http://www.gahanna.gov/Uploads/Images/Finance/SIPOC.png**

---
Root Cause Analysis

Purpose

To explore the major contributing factors to a specific breakdown or failure. Focuses on one actual occurrence rather than a type or pattern of failure.

Execution

- Focus on impacted goals
- Rely on facts about what happened
- Require input from those closest to the work
- Deliver several possible solutions

Time

Varies based on scale of project

Half day for a simple event

Complex problems with high risk may require significant investigation
Fishbone
5 Whys

1. Why • Excuse
2. Why • Easy Answer
3. Why • Thinking Harder
4. Why • Getting Close
5. Why • Real Reason
HOT COFFEE BURN

Debate the Solutions, Not the Cause

The Basic Facts

When a 79-year-old woman spilled a cup of McDonald's coffee in her lap and sued McDonald's, the case quickly became famous. More than 15 years later, it's still presented by some as a case for legal reform to stop frivolous lawsuits and defended by others as an important victory for victims of powerful corporations. But regardless of the legal implications, this famous case teaches a lesson about how to effectively solve problems.

She suffered severe, third-degree burns on her thighs, hips, and groin that required extensive hospital treatment, including skin grafts.

McDonald's defended its policy of serving coffee at a temperature of 180 degrees or greater by arguing that both coffee experts and market research showed that coffee should be served at this temperature. However, McDonald's had received 700 complaints of coffee burns (of varying severity) over the past 10 years.

Possible Solutions:
- Serve cooler coffee
- More coffee aroma and flavor
- Characteristics of coffee oils

Recommended by coffee makers
- Temperature of water (180°F)
- Policy: Serve coffee 180-190°F
- AND
- Taste more important than burn risk
- Evidence: Despite past complaints, policy was not changed
- Evidence: Rapidly expanding competitors also served very hot coffee
- Competition from other stores

Possible Solutions:
- Change lid to facilitate adding condiments
- Adding cream and sugar

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru

Possible Solutions:
- Spilled coffee in lap
- AND
- No cup holders
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Recommended by coffee makers
- Hot water trapped against skin for 90 seconds
- AND
- Skin immersed in hot water for 90 seconds
- Adding cream and sugar
- Removing lid

Recommended by coffee makers
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru

Possible Solutions:
- Offer cooler coffee at drive-thru
- Spilled coffee in lap
- AND
- Sitting in car
- Using drive-thru
Measures

“You can achieve incredible progress if you set a clear goal and find a measure that will drive progress toward that goal.”

Bill Gates: My Plan to Fix The World's Biggest Problems

“From the fight against polio to fixing education, what's missing is often good measurement and a commitment to follow the data. We can do better. We have the tools at hand.”
The difference between the time it takes to do it and the time it takes to get done.

What the customer values as well as key management indicators

The difference between stakeholders in the organization and the customer for a particular activity

Metrics form the baseline for improvement
Standard Work

ITERATIVE, but not regressive
JUST WHAT IS KAIZEN....?

fig. 1

A ROLL WITH SEEDS?

fig. 2

MY UNCLE'S KID, TWICE REMOVED?
Kai Zen
変善
Change Good
Kaizen FAQ

- What is a kaizen?
- Is it really a full time commitment?
- What will that week be like?
- What can I expect coming out of the event?
• Create process map
• Define metrics and set baseline

• Conduct value, waste, and flow analysis
• Conduct root cause analysis

• Brainstorm possible solutions
• PICK solutions
• Create future state map

• Implement recommendations or create plan
• Verify changes with process co-owners

• Establish communications plan
• Present findings to key stakeholders

Define  Measure  Analyze  Improve  Control
SPONSORSHIP
AND CHARTER
Problem Statement

Derelict buildings are buildings which are not safe for people to live in. Derelict buildings pose a safety and human health impact for the community. The City wants to reduce the number of buildings that become derelict and return derelict buildings to productive use. The longer the building is derelict the higher the chance of community impacts and possible demolition. The property owner is responsible for securing derelict buildings. When the property is left unsecured, the City boards up the property (approximately 350 annually). These board ups are costly for the City and property owners. As long as the property remains derelict, the City continues reinspecting the property which means the City incurs additional staff time and costs and the property owner continues to incur penalties.

Currently, the process to board up, issue penalties, and bill property owners is time intensive for staff and there are delays for the property owners from when the work is done to the time that property owners receive bills. Time delays in billing may be impacting cost recovery because property owners do not see the full impact of their inaction and trigger additional work and costs. Time delays early in the process delay all later stages and may impact the length of time the property remains in derelict status (non-productive use).

Scope

- From case creation to when the City receives payment.

Targeted Outcomes

What is the general intent for this situation in the future? How would we know if the project was a success?

- Increased cost recovery
- Eliminate waste in the process (including financial costs and staff time)
- Reduce the time from when work is completed/fine issued to billing of property owners
- Decrease the number of derelict buildings that are demolished
- Decrease the time it takes to return building to productive use

Boundaries

- No new technology investments (OK to request changes to current SAP system)

Timeline

<table>
<thead>
<tr>
<th></th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prep/Draft Charter</td>
<td>Approve Charter</td>
<td>Improvement Activity Recommendations</td>
<td>Implementation</td>
<td></td>
</tr>
</tbody>
</table>
The Team

- Sponsor
- Team Lead and Members
- CII Facilitators
- Resources
We are

- Focused on the **process** of problem solving
- Equipped with tools for exploring tough issues
- Invested in the team’s success
- Dependent on you for subject matter expertise and participation
- Working for the whole team (not just for the CMO, OMB, or management)
- Going to ask a lot of (obvious) questions

We are **not**

- A **BLANK** expert (I don’t have “the answer”)
- Invested in a **particular** outcome
- Going to let the team “fail”