LEAN THINKING BEFORE, DURING, AND AFTER YOUR PLANNING PROCESS

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City of Dublin, Ohio

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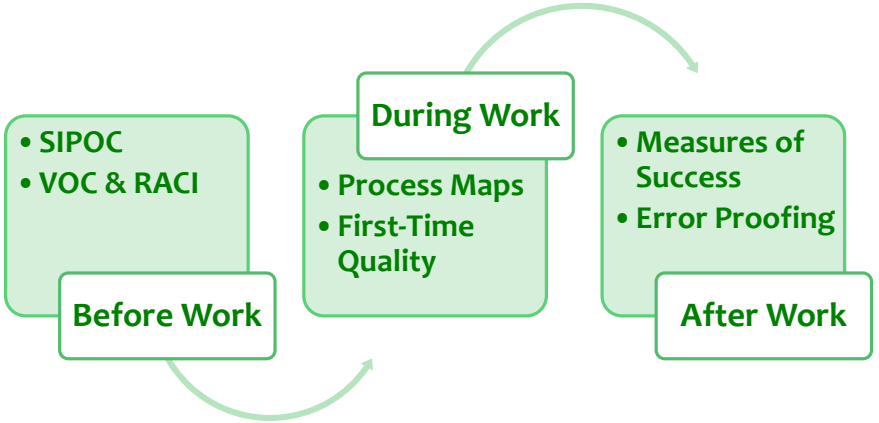
AGENDA

1. Introductions
2. Why Are We Here?
3. Process Analysis: Before, During, and After
4. Practical Application
5. Conclusion and Q&A



City of Dublin
OHIO, USA

PIEworks

PROCESS IMPROVEMENT | INNOVATION | ENGAGEMENT

City of Dublin OHIO, USA

13
Black Belts

40+
Green and Yellow Belts

40+
Process Improvement Projects

Since 2014

SCENARIOS

1. Planning Applications

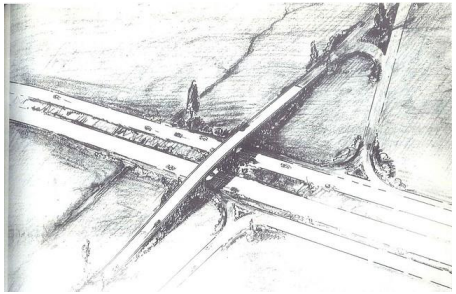
Planning Commission members don't get enough information to make informed decisions in a timely manner. Applicants have to keep going back and providing more information, which results in costly project delays. Through this process, the public doesn't feel like they're able to track projects and collect enough information about what applicants are actually proposing. It's a painful process for all parties involved.

2. Neighborhood Plan

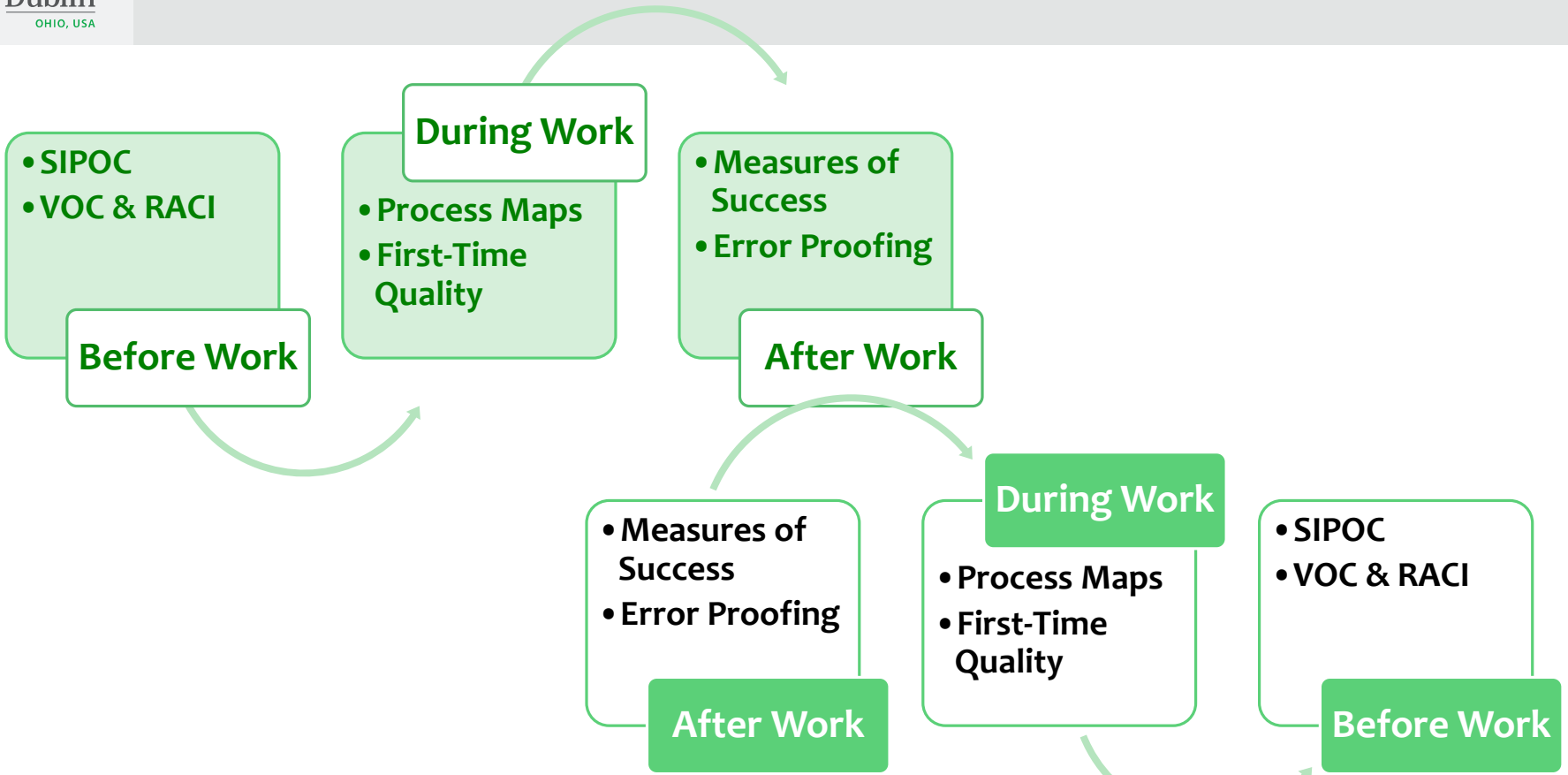
Your firm has been hired to create a neighborhood plan for a small community. The budget is more limited than you'd typically prefer for a project of this scale, but you know the Planning Director and have family ties to the small town and know it's much needed, the time is ripe, and it's a great project. And you know you need to make sure the plan is well-received and will be adopted by the end of the year.

3. New Highway Interchange

The MPO is working with the state DOT to plan a new highway interchange that has the potential to bring important economic development benefits to a currently struggling part of the region. There is also a park and ecologically sensitive waterway nearby. There is an urgent window to obtain funding in the next budget cycle, so the project plan has to be very thorough, well-presented, and ready to implement.



ANALYZE BACK-TO-FRONT



POST-PROCESS EVALUATION:
BEGIN WITH THE END IN MIND

POST-PROCESS EVALUATION

METRICS

Measure outputs and results

Also measure drivers

$$Y = f(x_1, x_2, \ldots, x_N)$$

Don't just measure Y, measure the Xs

MY WORST NIGHTMARE

What is the worst thing that can happen in this scenario?

How can we prevent it from happening?

ERRORPROOFING

Prevent errors from happening in the first place

Control for variation among inputs

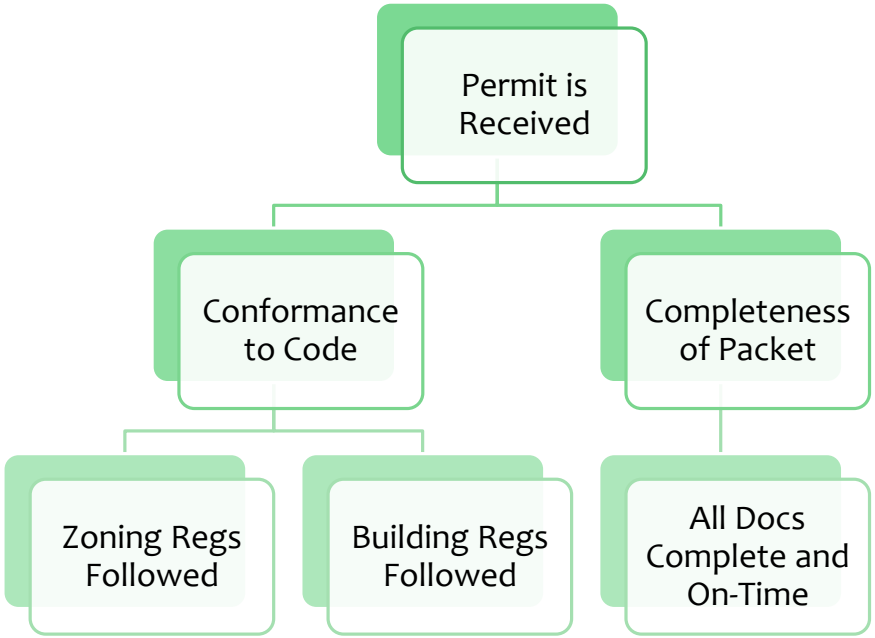
MY WORST NIGHTMARE

Promoting Attendance at Public Meetings

You are trying to draw a large crowd to a public meeting

What is the WORST thing that could happen?

MEASURES OF SUCCESS



Y - the Result

Xs - the Drivers

ERRORPROOFING

1. Elimination: Prevent possibility of errors
   Eliminate steps, remove unnecessary work, ***Remove Fields on a Form***
2. Replacement: Substitute more robust process for error-prone actions
   Automation, ***Planning Software*** *so everyone works on the current version*
3. Facilitation: Make it easy to avoid errors the first time
   Visual controls, drop-down menus, ***Color-Coded Folders***
4. Detection: Make it easy to identify errors that do occur
   Real-time spell checkers, frequent metrics, ***Sum Reconciliation***
5. Mitigation: Reduce the impact of any errors
   Fuses, redundant servers, ***No Hassle Returns Policy***

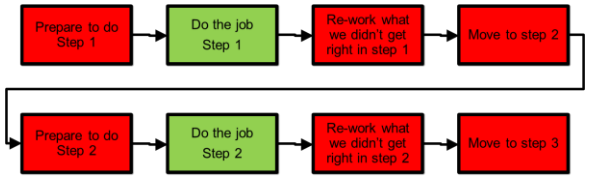
DURING THE OPERATION:
MONITOR THE WORK TO PREDICT SUCCESS

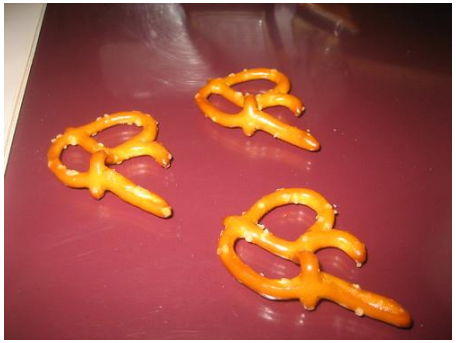
DURING THE OPERATION

PROCESS MAPPING

Sketch the Current Process so Everyone Sees it Through the Same Lens

Analyze it to Look for **Value** and **Non-Value**





1ST-TIME QUALITY

Defects are bad

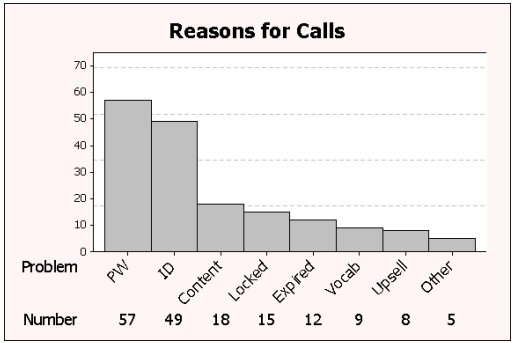
Scrap is bad

Rework is *just as bad*

PARETO CHART

Track the frequency of occurrence for each problem

Identify targets for improvement



PROCESS MAPPING AND ANALYSIS

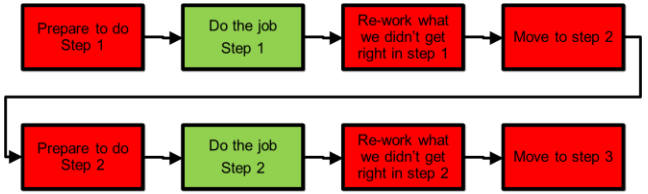
PROCESS MAPPING AND ANALYSIS

VALUE-ADDING ACTIVITIES

Every step in a process is either:

Adding Value for the Customer

or ***Not Adding Value***



Value-Adding process steps are those that:

Produce the Value (what the customer needs)

or

Deliver the Value to the customer

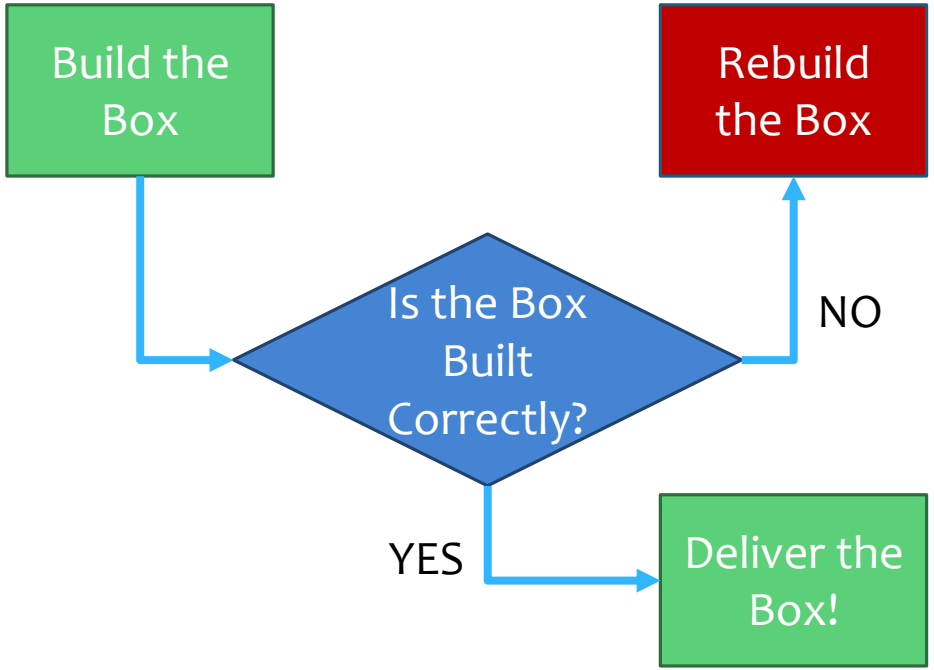
Always Strive to Minimize Non-Value Adding Steps in Your Work

FIRST-TIME QUALITY

REWORK

When work is not done correctly the first time:

1) It must be fixed by somebody
2) We annoy the customer by having to make the correction
3) We cannot work on something else

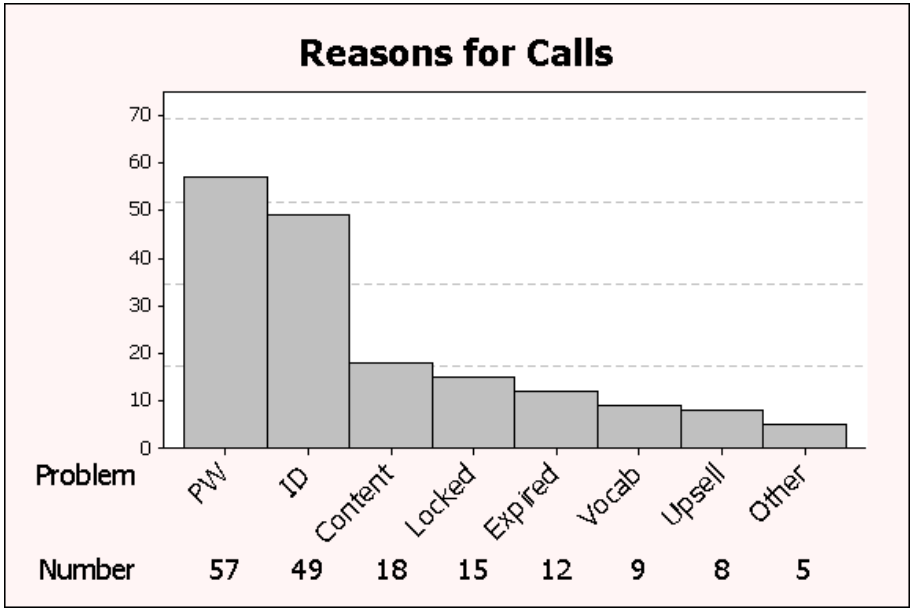


THE PARETO CHART

List of the Problems You Face
Sorted in Order of Frequency*
Look for Targets in the Tallest Bars
Lower Bars Can Be Good Targets

Then Find Ways to:

- *Resolve them More Quickly*
- *Prevent them in the First Place*



*Can also be sorted by Severity

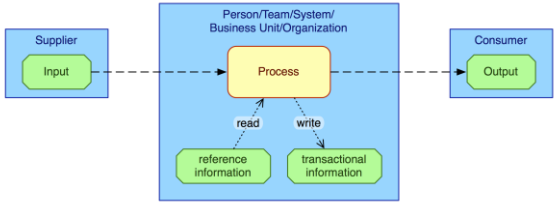
PRE-PROCESS PREPARATION:
SET UP YOUR TEAM AND YOUR CUSTOMERS FOR SUCCESS

PRE-PROCESS PREPARATION

VOICE OF THE CUSTOMER (VOC)

Active and Passive Collection of Opinions and Complaints

Don't Overreact!



SIPOC

High-Level Process Diagram

Matches Inputs to Outputs

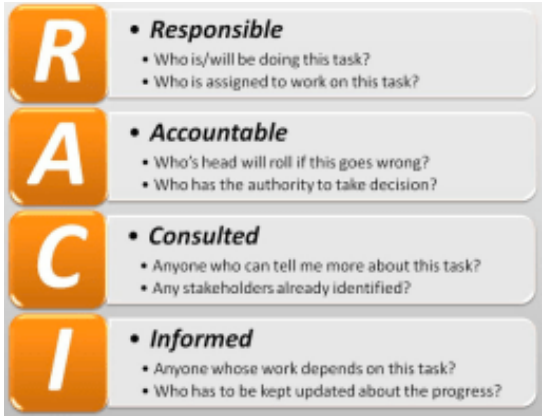
Unified View of Our Work

RACI

Identifies Possible Failures

Lists Critical Outputs

Defines Owners for Actions



VOICE OF THE CUSTOMER

MOMENTS OF TRUTH

Every customer interaction is a

Moment of Truth

Some are obvious: a service call, a town hall, placing an order over the phone

Some are less obvious: trying to use the city's website, receiving an incorrect statement or bill in the mail, reading a comment about the city on a website or in an article

Every Moment of Truth is a chance to improve or damage your relationship with the customer

POLL

VOC Collection

Large-scale surveys
Small-scale focus groups
Individual interviews
On-line questions & comments
Public meetings
Wait for complaints

SIPOC – THE TOOL FOR A POSITIVE START

Project Name: Growing Tomatoes **Project Scope**: Process of growing tomatoes, from obtaining seeds to harvest.

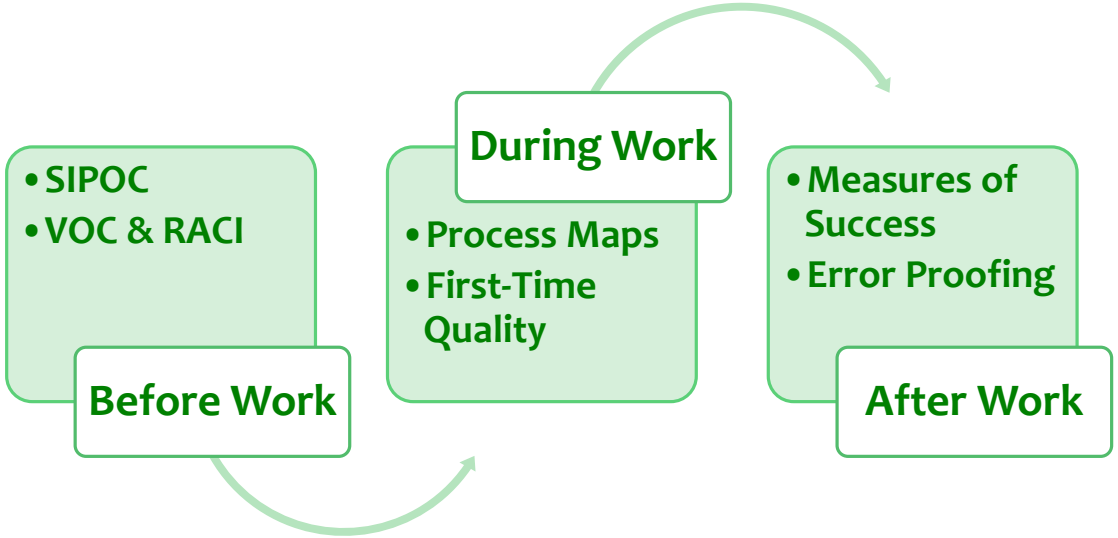
Sources Who supplies the process inputs?	**Inputs (Xs)** What inputs are required?	**Process** What are the major steps in the process?	**Outputs (Ys)** What are the process outputs?	**Customers** Who receives the outputs?
Catalogue or garden store	Seeds (appropriate for growing location, taste preferences)	1) Get seeds	Ripe Tomatoes • Color • Size • Taste • Sufficient water • Sufficient sunlight • Protected growing area	• Me! • Family • Friends & Neighbors • Farmer's Market
Home	Location with sufficient sun, access to water, protection from traffic & pests	2) Find the best spot to plant		
Garden store	Dirt (suitable for tomatoes and growing location)	3) Get dirt		
Catalogue or garden store	Seeds, Shovel	4) Plant seeds		
Home, garden store	Water, Hose or Watering Can (frequency, quantity)	5) Water seeds	Rotten Tomatoes • Size • Taste • Pests • Blight • Forgetfulness	
Home, garden store	Frame or cage; Fencing and/or netting; Weeding (frequency, type)	6) Manage the growing process		
Gardener	Timing/conditions (when tomatoes are ready to pick)	7) Harvest tomatoes		

RACI – SO EVERYONE KNOWS WHAT EVERYONE OWNS

Growing Tomatoes	Gardener	Spouse	Child	Farm Market
Get seeds	A	R		C
Look for right spot	A	C		
Get dirt	A	I	R	C
Plant seeds	A	I	I	C
Water seeds	I		A	
Manage the plant growing process	A		R	C
Harvest tomatoes	A	R		I

R- Responsible
A- Accountable
C- Consulted
I- Informed

ANALYZE THE PROCESS FROM BACK TO FRONT



PRACTICAL APPLICATION OF LEAN IN PLANNING

CONTACT INFORMATION

SEND YOUR PARETO CHARTS

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