Six Sigma Project - KPI Process Improvement Project Kickoff Meeting

Maximizing and Advancing Performance (“MAAP) Office

May 21, 2015

May 22, 2015

About Six Sigma

- Lean/Six Sigma
  - Set of techniques and tools for process improvement
  - Developed by Motorola in 1986. Used in manufacturing and office industries throughout the world.
  - A six sigma process is one in which 99.99966% of all opportunities to produce some feature of a part are statistically expected to be free of defects

What is a “Defect”?

- Any output that does not meet specified limits.
  - Examples
    - Customer needs KPIs by June 5. KPIs are not delivered until June 15th.
    - Customer needs accurate KPI. KPI calculated is inaccurate and/or doesn’t match other data customer has.
- If time is spent creating and reporting the KPI and the KPI does not meet the customer expectations, then that time spent is considered waste.
    - Time must be spent correcting the error
    - Customer faith in the product decreases with each noticeable defect.
- Every process is expected to have some amount of waste. However, what is tolerable waste depends on the process and the organization’s tolerance of waste.

Aspects of the Six Sigma Project

- Six Sigma Uses DMAIC Methodology
  - Define the system, voice of the customer and their requirements, and the project goals
  - Measure key aspects of the process & collect relevant data; calculate the ‘as-is’ Process Capability
  - Analyze the data to investigate & verify cause-and-effect relationships. Seek out root cause of the defect
  - Improve or optimize current process
  - Control future process

Define Stage – Project Charter

Project Description: The project will evaluate the current state of gathering and reporting data for Key Performance Indicators (KPIs) city-wide. The project will include an analysis of the needs of customers utilizing KPIs and the constraints for suppliers of KPIs.

Scope: Methods for gathering data. Methods for reporting data. Time and other inputs required from point of data creation to point of reporting of data.

Beginning point: Point at which data becomes available.
End point: Point at which data is uploaded into the CitiSource software utilized for reporting city-wide.

Not in Scope: This will not cover the actual information being gathered and reported. This does not include what types of data rises to the level of KPIs vs. performance metrics. This will not cover the actual use of the data once reported.

Deliverables:	Due Date:
Current state of process for gathering and reporting data	June 9, 2015
Clear understanding of needs of customers (Mayor, City Manager, Department Heads, City Council, Managers, etc.)	June 16, 2015
Measurement of (1) time spent on value added aspects of the process AND (2) time spent on non-value added (waste) steps of the process	June 30, 2015
Strategic Plan for improving/eliminating waste and delivering necessary products to customers	October 6, 2015
Implementation of improvements	November 15, 2015

Estimated Savings or Efficiencies:

Savings from eliminating duplication of efforts, waste created by waiting, and a quicker ability to report real-time data and assist with better decision making based upon data.

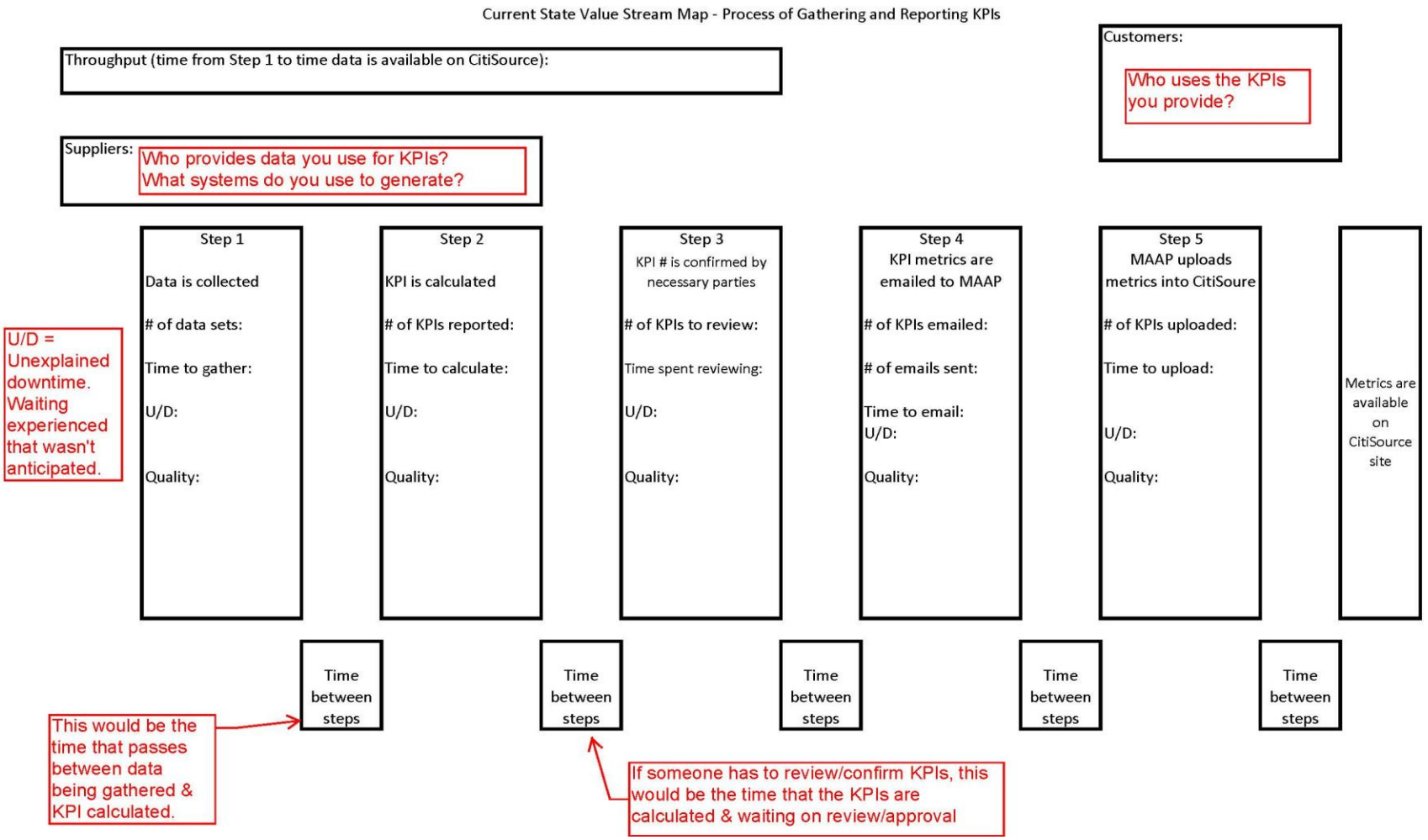
Project Team

Sponsor – Jim Twombly

Team Leader – Penny Macias

Team Members - Data Liaisons from each COT Department

Define Stage – Current State Value Stream Map



Current State – SIPOC Diagram

SIPOC

Process: Collection & Reporting of KPI Metrics

SUPPLIERS	Inputs	Process	Outputs	Customers	Requirements	Gap (Delta of Requirements- Outputs)
Customer, employee or vendor	Various # of data sets	Data collection & KPI calculations	Centralized storage of KPI information	Elected Officials		
Data Entry Personnel	Data entered into necessary database	Email KPI metrics to MAAP	Information that is accessible and capable of being filtered			
Supervisor	Review of data	MAAP enters data into the CitiSource database				
Department Head	Review/approval of data					

Measure Stage – Calculations

- Measurement will be in June and July
- We will be measuring
  - Total time to calculate & report metrics
  - Total number of metrics reported
  - Usage of the metrics that are reported: number of times users access CitiSource website
  - Quality of metrics (accuracy)
    - Example – If data sent to the calculator of KPI is incorrect that would be inaccurate & would impact the quality of the data for that step in the process. If MAAP inputs the KPI incorrectly into CitiSource that would impact the quality for the final step in the process.

Measure Stage - Calculations

MAAP can assist in calculating.

- Need to use clock (preferably stop watch) and calculate actual time spent.
- Document
  - Time started
  - Time finished
  - Any downtime in between where step is on hold (waiting on data from someone else, waiting on computer system that's not working)
- Once data is gathered, it will all be aggregated to calculate total time

Analyze Stage - Calculations

- This will look at the fully complete Current State Value Stream Map with the total steps in the process, time between steps, etc.
- Will calculate the cost of the time spent on the steps in the process
- Will work to calculate the value added to the organization
- Will run statistical analysis

Improve Stage

- Creation of a Future State Value Stream Map based upon analysis in previous stage
- Update SIPOC diagram
- Implement changes that are anticipated to optimize the process

Control Stage

- Will include
  - Control Plan
  - Implementation Plan
  - Potential Problem Analysis
  - Control Charts
  - Pilot and Implementation Strategy

Control Phase Conclusions

- Will measure after improvements implemented
- Compare the improvement (difference from data gathered at Measure Stage)
- Assess level of improvement achieved and any costs savings associated