Lean 6-Sigma Program

DEPARTMENT OF TECHNOLOGY

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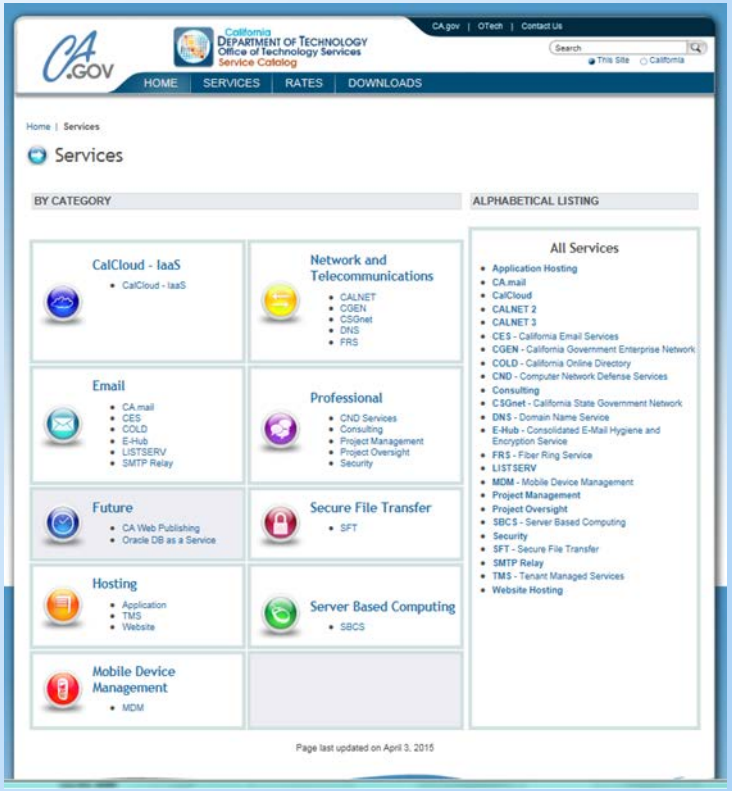
GLOBAL PRODUCTIVITY SOLUTIONS

Dept. of Technology Data Center and Services

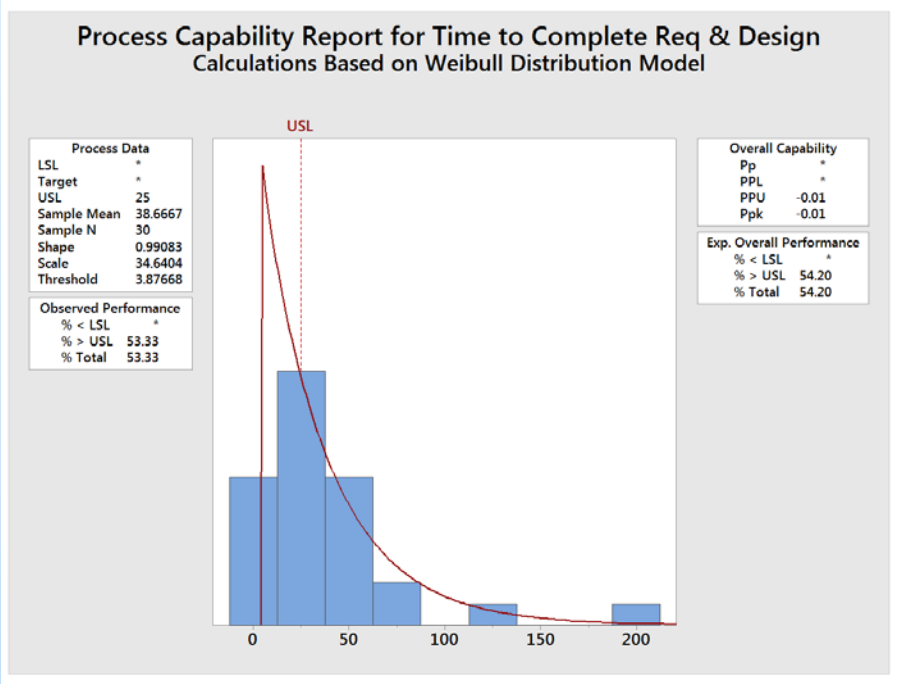
- Provides IT solutions
  - Managed, Non-managed
  - TIER III redundancy, required for mission critical and external facing applications
- Supports programs and services for federal, state, and local government



Windows Hosting- Requirements and Design

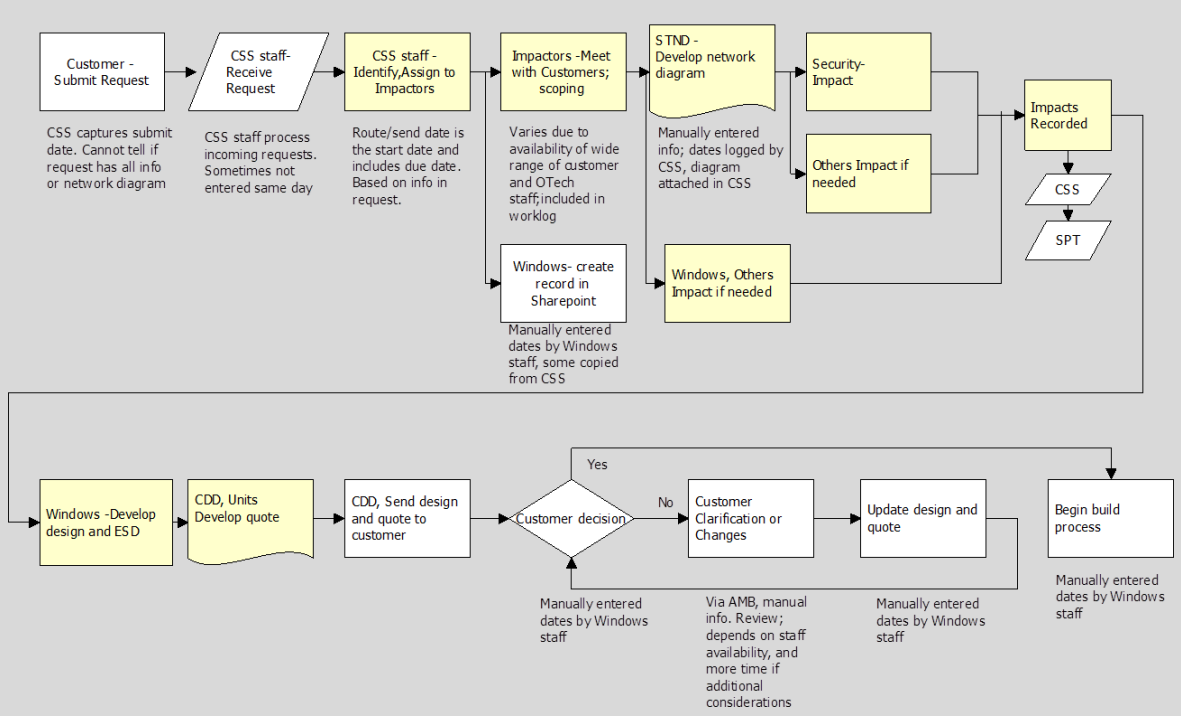
- **Problem Statement:** *Development of requirements and design for Windows Server Environment requests were taking an average of 51 days to complete.*
- **Objective:** *Complete requirements and design for Windows Server Environment requests in 25 days 95% of the time.*
- **Project Team:**
  - ***Megan Johnson– Green Belt***
  - ***Russ Leong – Windows Manager***
  - ***Paul Kruger – Windows Technical***
  - ***Michelle Takeda – Windows Technical***
  - ***Gregory Parks – Network Manager***
  - ***Dave Langston – Security Manager***
  - ***Kimberly Glenn – Project Manager, Service Request Fulfillment***
  - ***Tim Murphy – Enterprise Architecture***

Baseline Capability



- Data sample- fiscal year completed requests; 29 total
- Current average time to complete: 38.7 days
- 46.66 % of requests are within spec
- 53.33% of the time, completion takes longer than the goal of 25 days

Initial Process Map



Non Value Add activities include:

- Repeat reviews of requests
- Wait time related to information gathering, scoping
- Yellow shaded activities show updates, as team discussions progressed

Analysis Tools

- Fishbone Diagram
- Failure Mode Effect Analysis (FMEA)
- Multi-Vari Analysis
- Boxplot
- Interval plot
- Hypothesis Testing - One Way Anova
- Hypothesis Testing - Fitted Line Plot
- Hypothesis Testing – 2 Sample t

Key Analytical Findings

- None of the Potential Critical X's made a difference (statistically) in the number of days to complete requirements and design.
- Some data needed for analysis was not available
- Network intake document was not directly available for customers
- Two requests had been put on hold; skewed average

Key Analytical Findings, continued

- Issues with Scoping meetings
  - Delays in scheduling
  - Unclear ownership
  - Internal vs External requests are handled by different groups
  - No standardization or standard agenda
  - Multiple meetings needed per request
  - Network diagram dependent on scoping

- Impact process inefficiencies
  - Assigned upon receipt of the request with or without intake docs
  - Limited ability to comment until all intake info is received
  - Limited ability to comment until scoping meetings are held

Critical X's (root causes of problems)

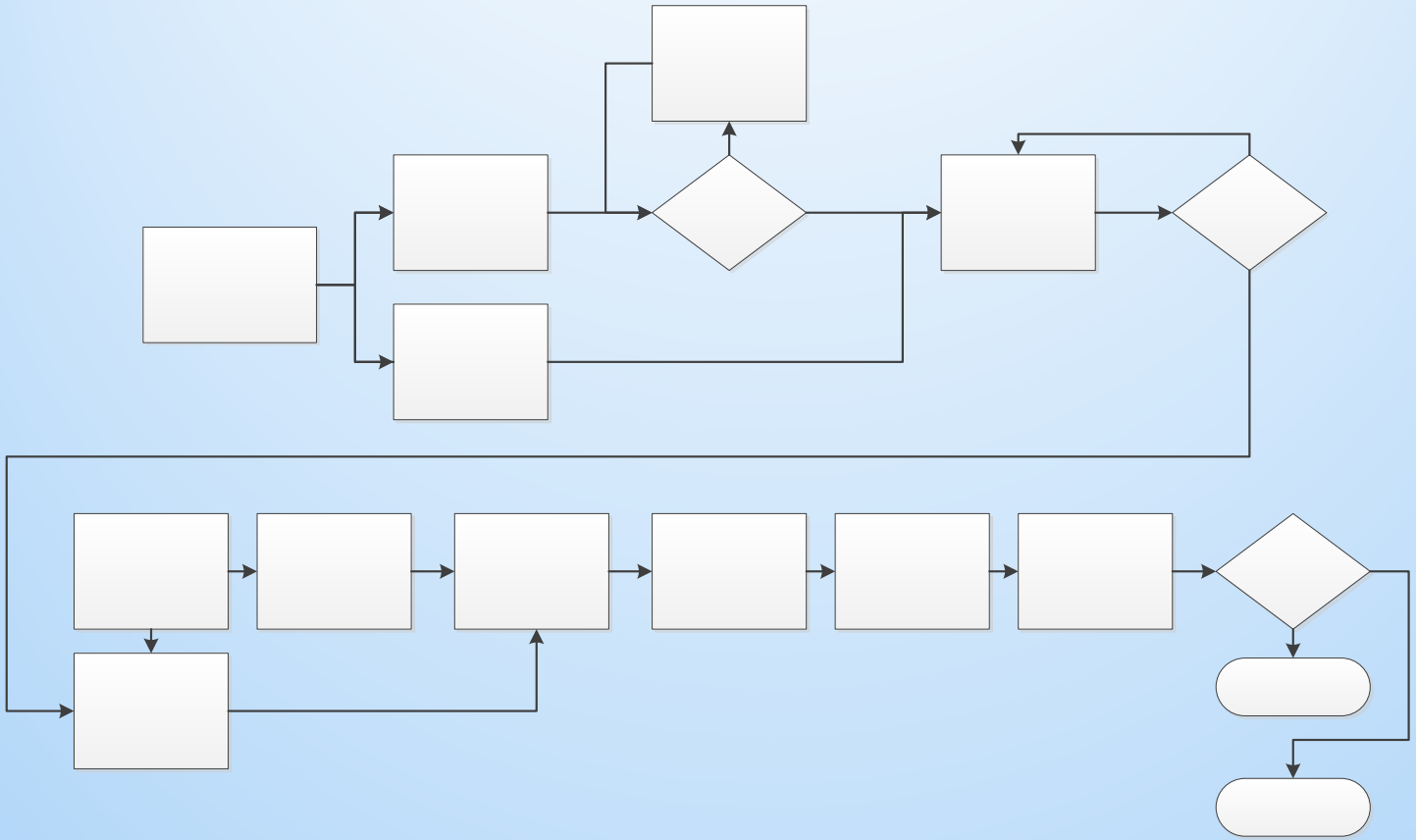
- Potential Critical X's included:
  - Completed intake documents – Windows only
  - Server Type requested (Virtual, Physical, Both)
  - Server Count
  - Standard vs Nonstandard request
  - Lead Staff Assigned
  - Customer Type (Internal, External)
  - ***No Critical X's were confirmed***

- Other Factors that were discovered
  - Deviations from the process existed
    - Moving forward with available info
    - Difficult to see due to lack of available data, recorded dates or timestamps

Improvement Techniques

- Finalize and implement network intake document
  - Early understanding of required connectivity; facilitates network diagram
- Facilitate early Scoping Meetings; schedule in parallel with impact.
- Designate coordinator for requests; ensure consistency
- Standardize approach to scoping meetings
  - Develop a standard agenda; efficiency and consistency
  - Schedule standing scoping meeting series
  - Include all potential parties to reserve time in advance
- New Service Request Fulfillment process in development
  - Includes workflow
  - Will improve data gathering and consistency

New Process Map



- Allows for impact and scoping to occur in parallel
- Eliminates double logging; one system of record, to be implemented

New Capability Analysis

- Potential for 5 days time savings
  - Elimination of Nonvalue Impact time
  - Not standard for each request; generally 5 days allocated
- Customers will be positioned to provide necessary network and connectivity requirements
- Additional days can be saved if multiple scoping meetings are reduced to one or two.
  - Assuming an additional week is needed to schedule and execute those, eliminating 1 can save 5 days.

Control Plan

- Maintain process documentation and roles and responsibilities
- Train key staff on the process
- Periodic internal review of the process
- Periodic review of the outcomes; control charts to validate and see trends, monitor for corrective action.
- Track and document causes for delays; develop Pareto charts to show volume and effect
- Leverage new SRF process and capabilities within Remedy (potentially auto-generate notifications, impact, scoping, and task assignment and completion dates, alerts such as requests with multiple scoping meetings (2+?)
- Continuous improvement; include process review to allow for new services or platform solutions as they become available.

Additional Benefits

- Customer satisfaction from quicker turnaround overall
- Better data removes assumptions about delays and their causes
- Higher morale, ability to know next steps and keep pace with requests
- Increased opportunities to leverage process improvements across other, similar processes
- Increased opportunity to include other important topics in scoping meetings, such as customer migration plans which sometimes result in follow up service requests.
- Opportunity to redirect requests with very little information to other areas for consulting or other service oriented discussion

Green Belt Contact Information

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