DMAIC Project Template

Telecomm Request Process Redesign

Independent Brokerage Group (IBG)

Phil Hamlett

<Project Tracking Number>

Define

11/4/2002

Team Charter

Business Case

Approximately 1,500 requests are serviced yearly by GEFA IBG's Telecommunications department for telephone-related services. In present-day, these requests are being taken by the GEFA-wide Productivity Center and forwarded on to the Telecomm team for resolution. Today it takes anywhere from 12 to 216 hours to service a request.

Problem Statement

Customers submit approximately 1,500 telecomm requests annually through the productivity center. Today it takes anywhere from 12 to 216 hours to resolve a request, resulting in poor customer service and a major productivity gap for the business.

Project Scope. Goals & Defect Definition

Goal: 100% of all IT/Telecommunications requests are serviced within 48 hours of receipt.

In Scope: Requests which contain strictly telecommunications-related service needs.

Out of Scope: Hybrid Service requests which contain both telecomm and non-telecomm –related service needs.

Defect Definition - Any IT/Telecommunications request that is not handled within 48 hours of receipt.

Organization Chart

Champion: Chris Chartrand
Key Stakeholders: Greg Christensen, Joe Kent
BB: Todd Beck
Project Leader: Phil Hamlett
Team Members:
Kenneth May - IT **John Shelor – IT**
Steve Ribero - IT
Kelly Hyson, Stacey Moody - Customer Service

Voice of the Customer

Customer	Sample Comments	Key Output Characteristics Important to Customer (CTQs)
GEFA Associate	1.)I need an easy, straightforward method of submitting service requests. 2.) I want prompt notification of request fulfillment with details of action taken 3.) I want to have my request completed in 48 hours	• User-friendly • Cycle time reduction
Telecommunications Personnel	1.) I want prompt notification that request has been initiated. 2.) I want an easy, straightforward method of closing a service request. 3.) I need an easy, straightforward method of reviewing request status.	• Status updates • User Friendly

Key Questions

What customer groups are the primary focus for this project?

GEFA Associates, Telecommunications Personnel

What methods were used to understand customer requirements?

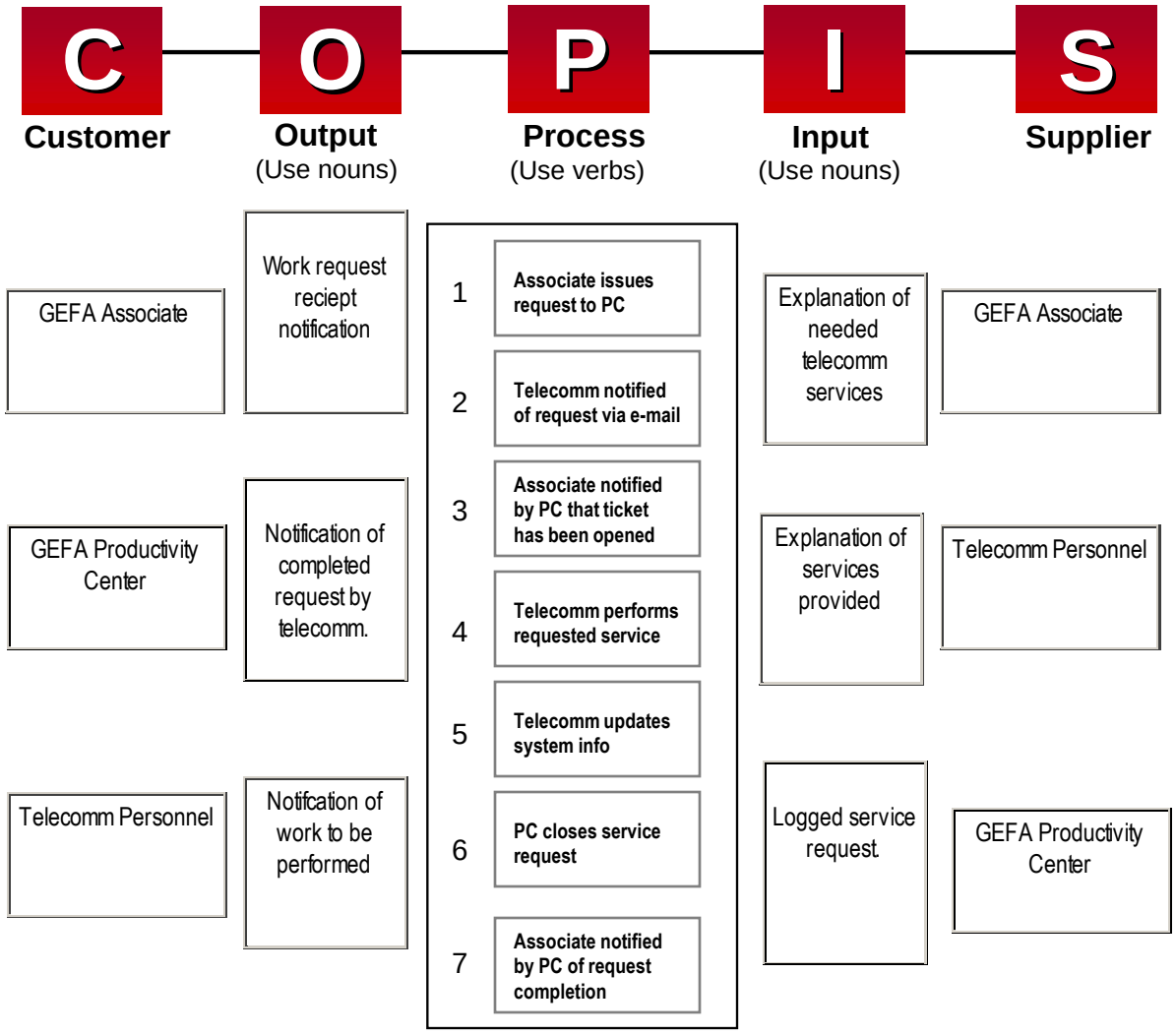
Focus Group

Which CTQ(s) will be the primary focus for this project?

Ease of request submission
Cycle Time Reduction

Facilitate quick request turnaround time

Current Process COPIS



Key Questions

What are the process boundaries?

Start: **User initiates request**

Stop: **Request is completed by Telecomm personnel**

What is included/excluded in the scope of this project?

Includes: **Requests involving only Telecomm services**

Excludes: **Hybrid requests involving other IT services**

What is the Unit, Opportunity, Defect?

Unit: Service Request

Opportunity: Telecomm service request

Defect: Telecomm request not completed in under 24 hours.

Potential Project Y Metrics

CTQ Output Characteristic		Hours to Process	Request acknowledge time	Request Data Capture	# of outstanding requests	Request types
Ease of Use	4			○	⊗	?
Rapid status notification	3	○	⊗	?	○	
Cycle Time	5	⊗	?	○	⊗	⊗
		57	32	39	**93**	**49**

⊗ Strong relationship (9) ○ Moderate relationship (4) ? Weak relationship (1)

Key Questions

How will we measure our performance?

Request Cycle time

What is the Project Y (the primary metric we are trying to improve?)

Telecomm service request cycle time

Is this metric a strong indicator of how well we are meeting the customer's CTQ(s)?

Yes

Streamline request process to drive down cycle time.

Data Collection Plan

Clarify Data		Develop Data Collection Plan				
Measure	Data Type	Operational Definition	Segmentation Factors	Who	From….To	Quantity
			Specific Telecomm Requests		2/1/2002 To 2/28/2002	

Clarify Historical Data

case_id	Completion_time_days
001478	24
006849	6
005647	0
006382	9
005821	0
006447	1
005762	2
008016	2
005929	4
009210	0
009728	0
005878	0
010396	10
010579	0
010931	0
010512	3
011297	3
011684	0
008418	0
010682	0
012134	0
012484	0
009827	8

Methodology:

•Collected data from 2/01/2002 to 2/28/2002

•Data extracted from historical archives from Clarify system used by the Compaq help desk

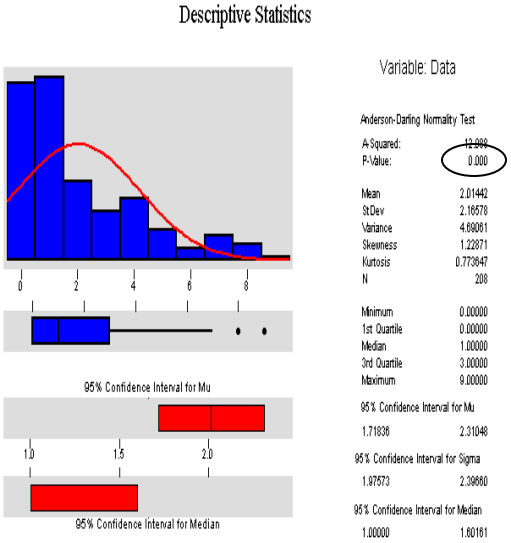
Key Discoveries:

• ***64*** out of ***208*** data points did not meet the customer CTQ of 48 hr case resolution.

• Large amount of data variation (0 to 9 days to process)

Collect the data to baseline the process

Current Process Capability



- Mean = 1.932
- Min Point = 0
- Max Point = 9
- Std Deviation =2.077
  - A lot of variation in the process stemming from the cycle time
- Normality Test – **P-Value = .000**
  - **Non-Normal Data**
  - **Requires DPMO Method for Sigma Calc (Product Report)**

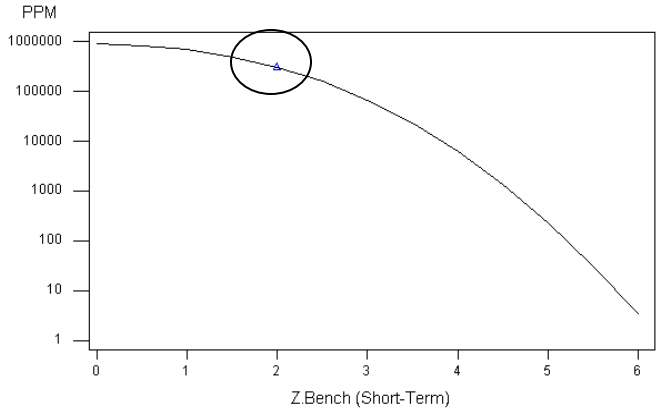
***Defect Definition: Any telecomm request that takes more than 48 hrs to resolve**

Units: 208
Number of Defects: 64
Number of Opportunities: 1

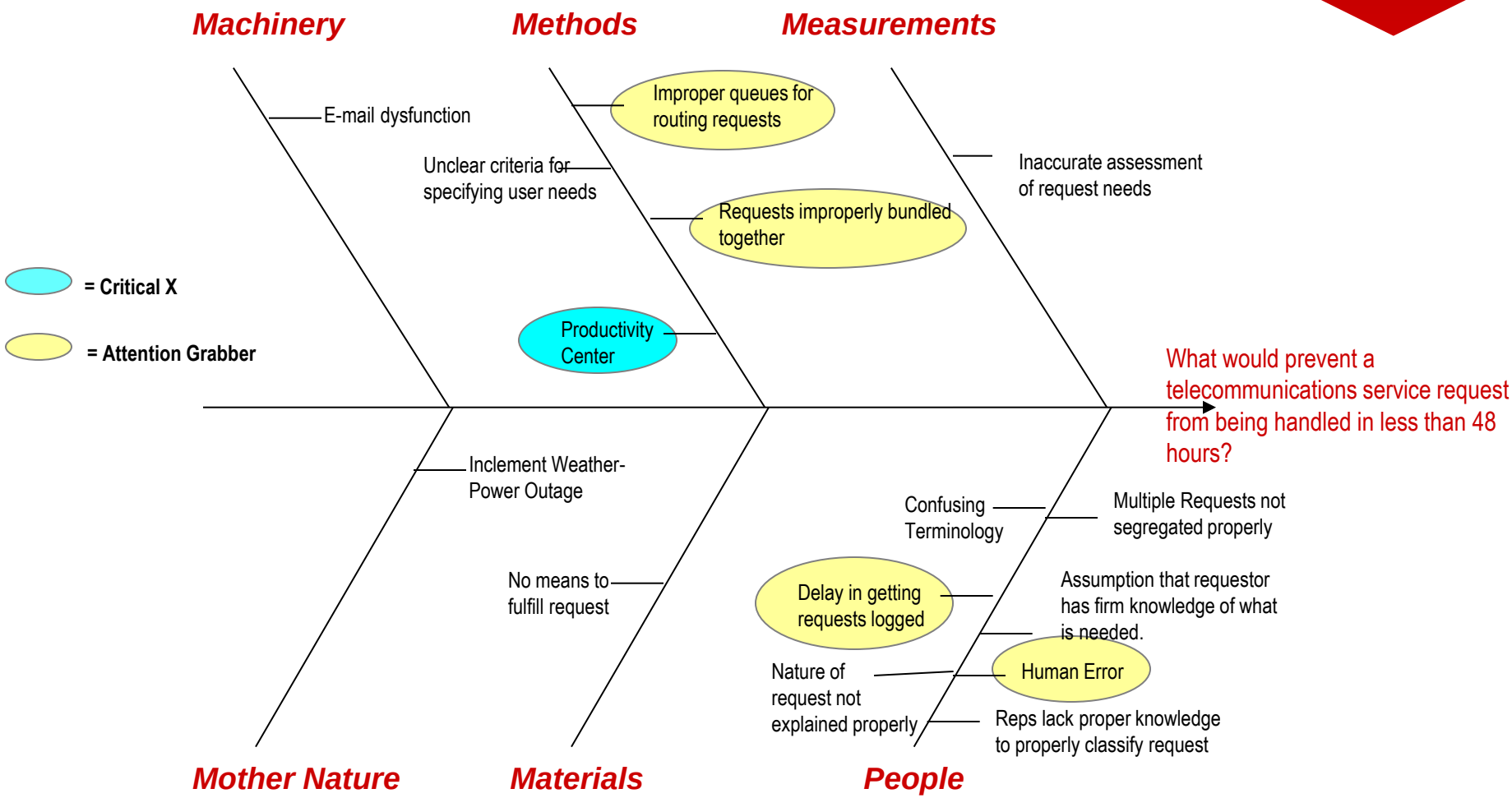
$Z_{bench}(ST) = 2.002$

Big Opportunity For Improvement

Report 8A: Product Benchmarks

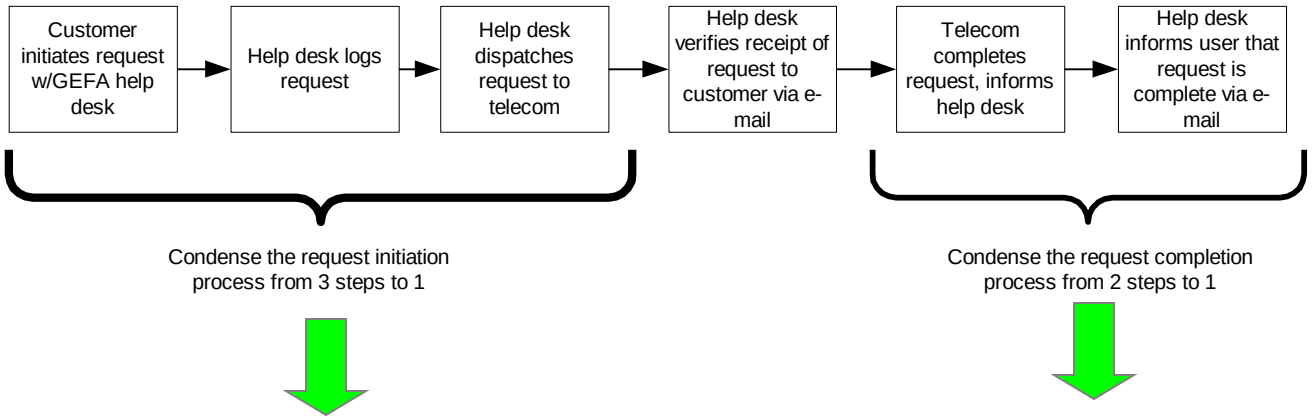


Root Cause Analysis

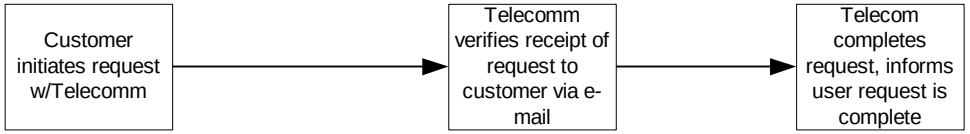


Proposed New Process

Out with the old…



…In with the new



ELIMINATED five steps in the Customer Critical Path….

Cut out the help desk "middle man"

Key Questions

What are the key process changes proposed?

Elimination of the need for the GEFA help desk to service telecommunications service requests

How will the impact of the changes be tested?

Initially will be run in a parallel pilot with the current help desk

Risk Analysis

Risk Issue (group by sub-category)	Prob	Det	Imp	Initial Score	R/O/Y/G	Abatement Action
Associate cannot navigate to request web page	4	1	10	40	O	Check users LAN connection settings
Web server where site is hosted is down	2	3	10	60	O	Confer with Compaq and web server administrator to determine cause and estimated duration of outtage
Database server where requests are housed is down	2	3	10	60	O	Confer with Compaq and DBA to determine cause and estimated duration of outtage
Exchange e-mail server is down	1	1	7	7	G	Confer with Compaq and DBA to determine cause and estimated duration of outtage
Request submission procedure not effectively communicated to GEFA IBG associates	1	1	4	4	G	Work with ORG communication resources to insure that a comprehensive communication plan for associates is established.
Associates experience difficulty in effectively issuing requests from web site	3	3	8	72	O	Work with each user area to provide brief & effective training on use of the request website

Key Questions

What other processes or systems are potentially impacted?

Any area where delayed phone problem resolution impacts customer service.

How were the potential risks evaluated?

Risks were identified by team and weighted accordingly.

What changes were made to the original proposal to counteract potential risks?

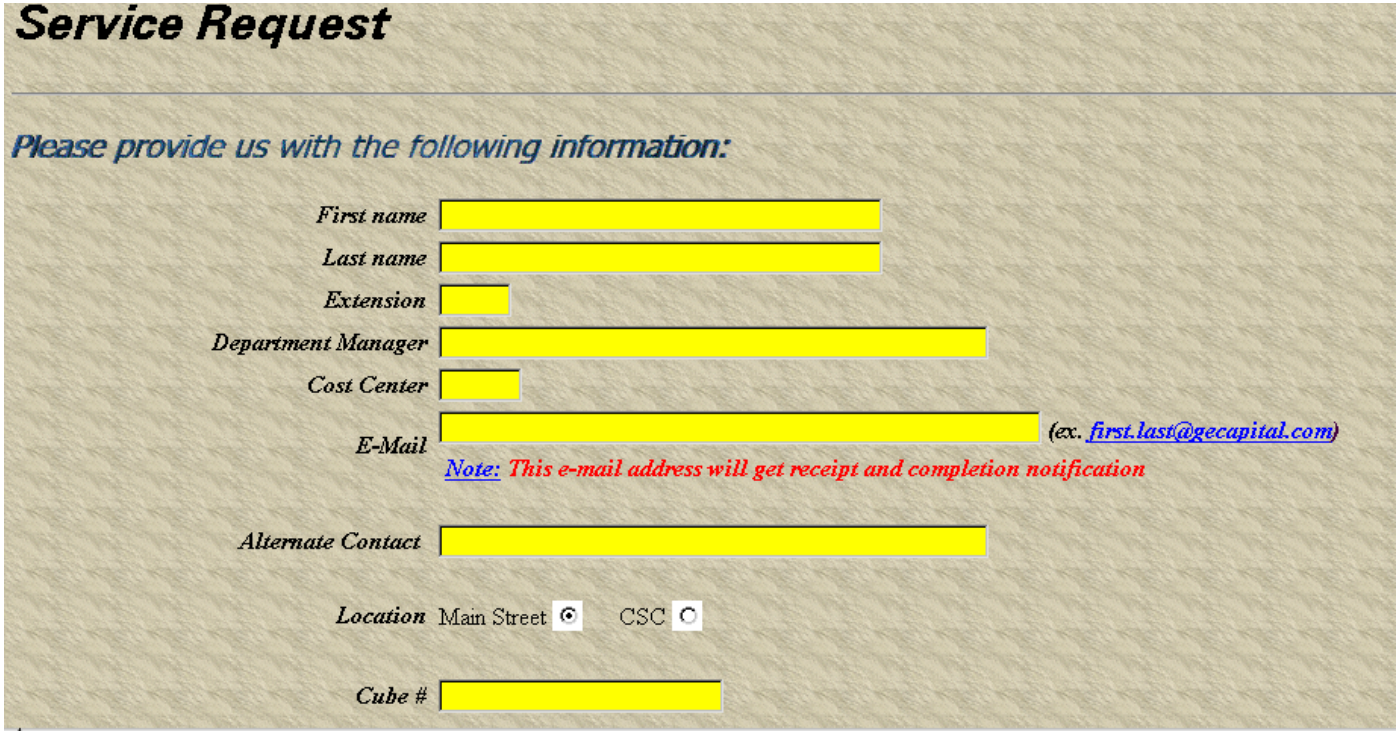
Current GEFA help desk facility can be used as fall back should failure occur.

What's the plan for continuing to monitor these and other risks throughout implementation and transition?

Monitor system usage such as to identify potential causes of lack of utilization

Strong Mitigation Strategy Minimizes Risk Potential

..and this is what gets us there



Service Request

Please provide us with the following information:

First name

Last name

Extension

Department Manager

Cost Center

E-Mail (ex. first.last@gecapital.com)

Note: This e-mail address will get receipt and completion notification

Alternate Contact

Location Main Street CSC

Cube #

Intranet URL: http://lyncitrix.gefa.capital.ge.com/telecom/

Leverage tools & skills already present

Implementation and Communication Plan

Implementation Plan

• Parallel **pilot** with help-desk transition on October 1st, 2002

• Implement as exclusive means of issuing Telecommunications requests on January 1, 2003.

Communication Plan

• Align with ORG-Communication to notify the GEFA Customer Community of the go-live date along with details of appropriate use of the new system, utilizing the following announcement:

GEFA-Lynchburg Telecommunications has a new process for submitting requests for Telecommunications Services. This process eliminates the need to call the GEFA Productivity Center.
To submit a request utilizing the new process, go to the GEFA-Lynchburg Telecommunications Intranet Site, locate the blinking "*Request Service*" link in the browser's left-most frame and click. Fill in the blanks on the form completely to provide telecommunications personnel the necessary information to fulfill your request. Upon completion of the form, click the "*Submit Request*" button to issue the service request. *Examples of telecommunication services include, but are not necessarily limited to: moving a phone, adding a phone, requesting a Dialcomm card, IVR changes, voice mail changes, adding a home modem line , requesting a pager or cell phone, and scheduling video conferences. With this process, you should receive quicker response to your telecommunications needs, and you will be saving expense for GEFA at the same time!!*
Please refrain from issuing telecommunications service requests through the GEFA Productivity Center, and use the process described above.
If you experience any problems or have any suggestions, please contact **Joe Kent** at ext. 5249 or via e-mail.

Key Questions

What resources are necessary for implementation?

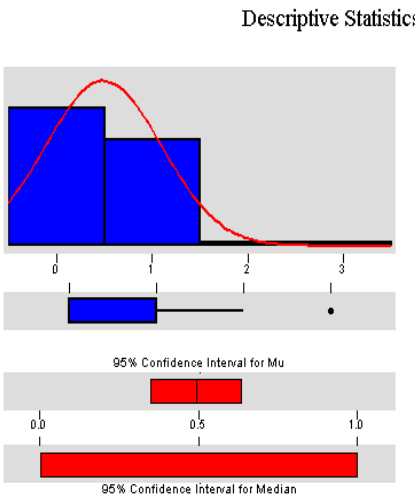
Web Server Administrator - Jeff Chapman

Database Administrator - Phil Hamlett

What approaches have been used to mobilize commitment for the proposed changes?

Clear communication of coming service request changes to GEFA associates

Present a clearly defined objective for the new system



Variable: New Data

Anderson-Darling Normality Test

A-Squared:	9.488
P-Value:	0.000
Mean	0.492958
StDev	0.606471
Variance	0.367807
Skewness	1.21380
Kurtosis	2.49866
N	71
Minimum	0.00000
1st Quartile	0.00000
Median	0.00000
3rd Quartile	1.00000
Maximum	3.00000

95% Confidence Interval for Mu

0.34941	0.63651

95% Confidence Interval for Sigma

0.52053	0.72667

95% Confidence Interval for Median

0.00000	1.00000

- Mean = .493
- Min Point = 0
- Max Point = 3
- Std Deviation = .6065
  - Still variation, but much improvement over current process
- Normality Test – **P-Value = .000**
  - **Non-Normal Data**
  - **Requires DPMO Method for Sigma Calc (Product Report)**

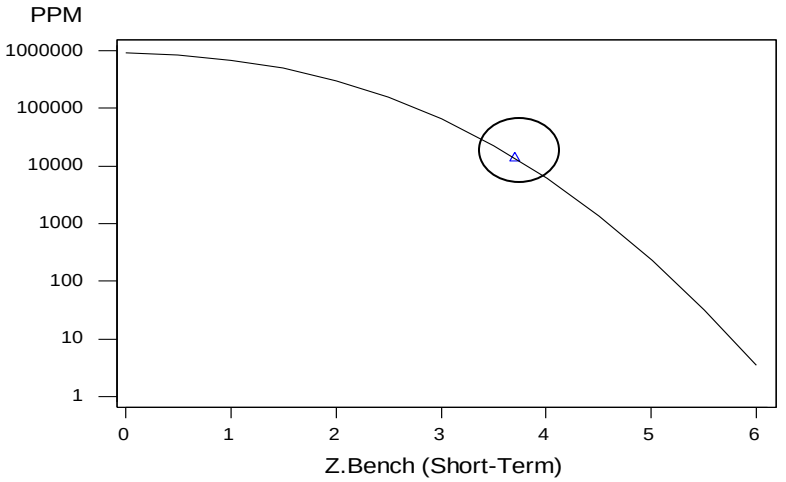
***Defect Definition: Any telecomm request that takes more than 48 hrs to resolve**

Units: 72
Number of Defects: 1
Number of Opportunities: 1

$Z_{bench}(ST) = 3.700$

Significant process improvement

Report 8A: Product Benchmarks



Non-Normal Data → Test the Medians using **Mood's-Median Test**

Ho: Medians from both data sets (before & after) are equal
Ha: Medians from both data sets are not equal (significant statistical difference)

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Mood median test for Data

Chi-Square = 17.07   DF = 1   P = 0.000

                                          Individual 95.0% CIs
Factor      N<   N>=   Median     Q3-Q1   +---------+---------+---------+---
---
1           39    32     0.00      1.00   +-------------------)
2           58   150     1.00      3.00                       +-----------)
```

Conclusion:

With p < .05, it can be concluded with 95% confidence that medians differ by a statistically significant amount, therefore we reject Ho and accept Ha, there is significant statistical difference in the two processes.

Process improvement verified !!

Process Control Plan

Process Indicators to focus on:

▲ Usage consistent with volume experienced with GEFA help desk usage

▲ Meaningful data capture from customer that optimizes the request fulfillment process

▲Discontinued use of the GEFA help desk for Telecomm service requests

▲ Non-Telecomm service requests being submitted through the new system.

▲ Inadequate information supplied by customer which adversely impacts request fulfillment.

Focus on acceptance of the process

Key Questions

What metrics will be monitored going forward?

Request cycle time

How will these metrics be reported?

Through the Telecommunications intranet portal

What have you done to ensure the new process becomes institutionalized?

Made the new process as simple as possible for the customer