The ABC’s of Sustainable Process Performance

Presented by
MaryKay Scully
Genworth Mortgage Insurance

Overview

What is Your Goal?
Using a Disciplined Approach to Achieve Sustained Process Performance

Process Analysis
– Establish Customer CTQ’s
– Techniques, Tools and Action Planning

Benchmarking
– Change
– Baselining and Goal Setting

Process Controls
– Methods, Reporting and Reaction
What is Your Goal?

- Not Jointly Understood Within the Organization
- Not Well Controlled
- Not Actively Managed Limiting Potential Improvement

A Focus on Goals
A Disciplined Approach

**Six Sigma Quality** – reduce defects, target quality

**Lean Six Sigma** – eliminate non-value added work, target speed

- Total Quality Management (TQM) – identify, analyze, solve problems
- Quality Circles – team based problem identification and resolution
- Juran - identify the customer, identify customer needs, develop or improve the process

---

A Disciplined Approach - Six Sigma

- A statistical Unit of Measure That Reflects Process

<table>
<thead>
<tr>
<th>Level</th>
<th>DPMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Sigma</td>
<td>3</td>
</tr>
<tr>
<td>5 Sigma</td>
<td>233</td>
</tr>
<tr>
<td>4 Sigma</td>
<td>6,210</td>
</tr>
<tr>
<td>3 Sigma</td>
<td>66,807</td>
</tr>
<tr>
<td>2 Sigma</td>
<td>308,537</td>
</tr>
</tbody>
</table>

Measuring Defects Per Million Opportunities (DPMO) Allows You To Compare Performance On Dissimilar Processes
A Disciplined Approach - Six Sigma

Process Analysis
Process Analysis - Some Inconvenient Truths

Pervasive Issues that Consistently Impact the Performance of the Loan Origination Process

- The degree to which the quality of the file the LO puts together is discounted or ignored
- The prevalence of subject matter experts serving in management or supervisory roles with little to no management training or experience throughout the process
- The existence and nurturing of a SEWFI culture (someone else will fix it)

Process Analysis - Some Inconvenient Truths

Pervasive Issues that Consistently Impact the Performance of the Loan Origination Process - continued

- The degree to which your operation is “siloes” into functional units with very few, if any, employees having a holistic view of the process

- The absence of a formal process for capturing defect data, aggregating the data and providing detail to those that created the defect
Process Analysis

Listen to The Customer
VOICE OF CONSUMER

Strategies & Business Objectives

RESULTS: TOP-LEVEL INDICATORS

Identify Processes That Need to Be Improved
CORE PROCESSES

Key Process Map's

Use a Disciplined Approach to Improve Processes
PROCESS CONTROL SYSTEM

“SOLVING BUSINESS PROBLEMS”
Six Sigma Quality (DMIC)

NTA 7
Process Analysis - Define, Measure, Analyze

**DEFINE**
- Customer Needs (CTQ’s)
- Project Charter
- Process Map (SIPOC)

**MEASURE**
- Specific Project CTQ’s
- Customer Specifications
- Data Collection
- Performance Standards
- Root Causes/Variation Sources

**ANALYZE**
- Current Process Sigma
- Relationship Strength
  - High = 9
  - Med = 3
  - Low = 1

---

**Establish Customer CTQ’s**

<table>
<thead>
<tr>
<th>Importance Rating</th>
<th>Quick</th>
<th>Clean</th>
<th>Friendly</th>
<th>Inexpensive</th>
<th>Taste</th>
<th>Healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 (High)</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>1 (Low)</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

- Importance Rating:
  - 5 = High
  - 1 = Low

- Relationship Strength:
  - High = 9
  - Med = 3
  - Low = 1

---

**Process**

<table>
<thead>
<tr>
<th>Customer Service</th>
<th>Take Order</th>
<th>Fill Order</th>
<th>Prepare Food</th>
<th>Store Food</th>
<th>Select Food</th>
<th>Purchase Materials</th>
<th>Plan Capacity</th>
<th>Clean</th>
<th>Train Employees</th>
<th>Advertise</th>
<th>Track &amp; Report Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H</td>
<td>H</td>
<td>L</td>
<td>H</td>
<td>M</td>
<td></td>
<td></td>
<td>H</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>M</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>H</td>
<td>M</td>
<td></td>
<td>L</td>
<td>H</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H</td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>H</td>
<td>H</td>
<td>M</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H</td>
<td>H</td>
<td>L</td>
<td></td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>L</td>
<td></td>
</tr>
</tbody>
</table>

- Importance Rating:
  - Take Order: 6
  - Fill Order: 6
  - Prepare Food: 6
  - Store Food: 9
  - Select Food: 7
  - Purchase Materials: 9
  - Plan Capacity: 7
  - Clean: 5
  - Train Employees: 1
  - Advertise: 4
  - Track & Report Costs: 4
What Do You See?

Your Lender
Your Buyer
Your Appraiser
Your Tax Assessor

Process Analysis

At Least Three Versions
(Usually)

What You Think It Is...
Actually Is...
Like It To Be...
Process Mapping - Areas of Focus

**Re-work** - anytime the same or similar process is repeated such as reviewing information in the loan file, re-issuing a document, re-printing, copying, etc.; cost of rework

**Hand-offs** - the number of times and the physical distance of the hand-off

**Touch points** – customer, Loan Officer, Underwriter

**High-cost or high-time** consumption tasks
Process Mapping - Areas of Focus

**Bottlenecks** - areas where process tasks stop or slow (delays)

**Quality** - areas where errors originate or are discovered

**Value vs. Non-value added** - task assessment for value as viewed by customer or business

---

Process Analysis Tools – Measuring Process Performance

**Key Process Measurements**

<table>
<thead>
<tr>
<th>Process In-Line Measures</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>Customer Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Outcome Measures**

- Y1
- Y2

**“X” = Process In-Line Measures**
(Critical Points in Process to Assess Performance)
Examples:
- X1 = % of Files Missing Critical Documents
- X2 = Cycle Time From AU Approval to “Ready to Close”

**“Y” = Outcome Measures**
(Overall Performance Indicators)
Examples:
- Y1 = % Loan Process Cycle Time > 35 Days
- Y2 = Loan Processing Cost > $
Measuring Process Performance... “In-Line Process Metrics”

**X1 LO File Quality**
- X1 % Files Received in Operations with Incomplete/Missing Critical Docs
- X1 % Files Received in Operations with Incomplete 10K3
- X1 % Files Received in Operations Outside of Delivery SLA

**X2 Processing File Quality**
- X2a % of Files Submitted to UW with 1st Pass Approval
- X2b % of Files Requiring a Restructure (Product or Pricing Change) at UW
- X2c % of Files not Submitted to UW in defined SLA Time Frame
- X2d % of Contacts with Customer to Request Documentation
- X2e % of Files Not Submitted to UW for Clearing of Conditions that can not be CTC
- X2f % of Files not Submitted to UW for CTC in defined SLA Timeframe

**X3 CTC File Quality**
- X3 % of Files Not Delivered to Closing within defined SLA Timeframe
- X3 % of Files Requiring Closer go back to Processor or UW for Issues
- X3 % of Files Where Closing Data Delays due to Lender Issues
- X3 % of Files that Require Review of Documents

**Measuring Process Performance... Outcome Metrics**

**Y1 Profitability Per Transaction**
- Y1 Sales Cost Per Transaction
- Y2 Operation Cost Per Transaction
- Y3 Revenue Per Transaction
- Y4 Pull-Through Rate
  - Registration or Lock to Decision
  - Decision to Ready-to-Close
  - Ready-to-Close to Close

**Y2 % Loans Not Performing as Promised**
- Y1 % Loan Defaults
  - % Early Payment Defaults
  - % Subsequent Payment Defaults
- Y2 % Early Repayments
- Y3 % Non-First-Time Fundings
  - Non-Suitability Defects
  - Suitability Defects

**Y3 % Loans Delivered as Ordered**
- Y1 Turnaround Time Per Transaction
  - Time from Application to Decision
  - Time from Decision to Close
- Y2 % Loans Closing with Pricing Variation from Original Disclosure
- Y3 Requests for Additional Information not Originally Requested from Borrower
- Y4 % Times Closing Data Delayed due to Lender Issues
A Disciplined Approach – Six Sigma

**Root Cause Analysis**

This tool allows a team to identify, work on, and solve problems identified in the performance of the new process. This approach ensures the team is proactively defining the problem and EVERYONE is working toward the same goal. Then, identify and prioritize causes, develop discussion history to rank and narrow priority issues, identify focused solutions with team buy-in, and recommend action plans to implement solutions.

**Process Analysis Tools - Root Cause Analysis**
Process Analysis Tools – Solution Selection

Solution Selection Matrix Template

<table>
<thead>
<tr>
<th>Process</th>
<th>Cost</th>
<th>Time</th>
<th>Risk</th>
<th>Return</th>
<th>Ease</th>
<th>Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Solution Selection Matrix Example

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
<th>Impact</th>
<th>Ease of Implementation</th>
<th>Ease</th>
<th>Processing</th>
<th>Time</th>
<th>Risk</th>
<th>Return</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>4</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Easy</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Hard</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Process Analysis Tools – Solution Selection

Quick Hit Work-Out Possible Project

High Business Impact

Low Business Impact

Ease of Implementation

Hard

Best (Home Run)

Extra Work (Sliding Home)

Good (Single)

Waste of Time (Foul Ball)

Selecting the Correct Approach Saves Time and Speeds Results

Genworth Financial
Immediately following an organizational change, productivity drops as much as 3.6 hours a day (Department of Labor Statistics).

After a staff reduction, morale and productivity fell in 75% of 500 firms that were surveyed.

"I welcome change, as long as nothing is altered or different."
The Change Curve

Leading Change
## Process Analysis Tools – Action Planning

### Problem Solving - Action Plan

<table>
<thead>
<tr>
<th>Issue:</th>
<th>Recommendation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits:</td>
<td>Action Plan:</td>
</tr>
<tr>
<td>Required Resources:</td>
<td>Champion:</td>
</tr>
</tbody>
</table>

**Who, What, When and How**

---

## Process Analysis Tools – Action Planning

### Problem Solving

...“Quick Hit” Action Plan

<table>
<thead>
<tr>
<th>Issue:</th>
<th>Recommendation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit:</td>
<td>Required Resources:</td>
</tr>
<tr>
<td>Action Plan:</td>
<td>Champion:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action Plan:</th>
<th>Timing</th>
<th>Measurability</th>
</tr>
</thead>
</table>

**Who, What, When and How**
Benchmarking and Goal Setting

Benchmarking

Internal Benchmarking
- Identify internal Best Practices and replicate them

Competitive Benchmarking
- Obtain published benchmarking data and compare to your own performance. Stratmor, FNMA, etc. May require payment of a fee, membership and contribution of your performance data

Strategic Benchmarking
- Obtain published benchmarking data from “best in class” or “world class companies
Process Controls

A Disciplined Approach – Six Sigma
Establishing Process Controls

Are Errors Unavoidable?

**Traditional view: Errors are inevitable.**
- People are only human
- There is variation in everything
- Lack of standard operating procedures result in each person having their own way to do things
- Inspection is necessary

**Six Sigma view: Errors can be eliminated.**
- Not all errors can be eliminated, but many can and others can be reduced
- The more errors we can eliminate, the better our quality
- The need for inspection can be reduced or eliminated

Establishing Process Controls

Three Main Control Mechanisms

- **Risk Management & Compliance**
  - Avoid Potential Problems
- **Mistake Proofing**
  - Identify and Resolve Potential Problems
- **Process Control Systems**
Establishing Process Controls

Mistake Proofing Examples
Other Industries vs. Mortgage

DETECTION and SHUTDOWN
Laundry dryers that shut down when overheating is detected.

DETECTION and SHUTDOWN
Hard stops – we can not move forward until field completed or document received.

DETECTION and CONTROL
Selecting and packing apples of certain sizes.

DETECTION and CONTROL
If investor guidelines not met variances must be addressed.

PREVENTION
Drop-down menu that allows user to select from a correct range of choices.

PREVENTION
Drop-down menu that allows user to select from correct range of choices – appraisers, title agents.

Establishing Process Controls

Key Process Measurements

<table>
<thead>
<tr>
<th>Process In-Line Measures</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Outcome Measures

<table>
<thead>
<tr>
<th>Customer Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
</tr>
<tr>
<td>Y2</td>
</tr>
</tbody>
</table>

“X” = Process In-Line Measures
(Critical Points in Process to Assess Performance)

Examples:
X1 = % of Files Missing Critical Documents
X2 = Cycle Time from AU Approval to "Ready to Close"

“Y” = Outcome Measures
(Overall Performance Indicating)

Examples:
Y1 = % Lean Process Cycle Time > 20 Days
Y2 = Loan Processing Cost > $
Establishing Process Controls

Define Content and Cadence of Reporting
- What, where, when and how will data be gathered and displayed
- How often will reports be generated
- How often will reports be reviewed by senior management

Define Distribution and Accountability
- Who will receive reports
- What is the express responsibility of each party receiving a copy of the report

Define Tolerances
- For each defined metric what is the tolerance i.e. Cycle Time – Target Cycle Time 35 Days – Anything over 40 Days Requires Action

Define Process for Response
- Define explicitly who will respond to issues reflected on the reports
- Define explicitly what steps they are to take, who they are to report action
- Define expectations for timing of resolution and updates
Best Practice Sharing And Projects Include:

- Process Alignment with Mortgage Industry and GNW Guidelines
- Quality – Reduction in Loan Defects
- Customer Experience Enhancement
- Targeted Problem Solving