Integrating VOC, Kano, and QFD in Process Design

How a Financial Services Company Utilized DFSS to Eliminate “The Herbie”

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Program Manager
Farm Credit Mid-America

“Securing the future of rural communities and agriculture”

- Agricultural lending cooperative
  - Indiana
  - Ohio
  - Kentucky
  - Tennessee
- Business Segments / Products
  - Farm loans
  - Rural 1st home loans
  - Crop Insurance
  - Agribusiness
  - Capital / Middle Markets
- $22B owned and managed assets
- 100,000 customers
- 1,150 employees

(Consumer Lending)
The Why

Burning Platform

Business need
• Grow consumer lending segment $600M in 2019

Opportunity
• Consumer lending center of excellence for the Farm Credit System
• How – through Rural 1st partner integration

What is preventing us?
• Scalability of current consumer loan process

Current State – Consumer loan process turn time
• Application date – Close date
• 55 days (avg)

Call to action
• Rural 1st partner ready 1Q2019
• Target (consumer loan process turn time): 30 day (avg)
D - Define

Consumer Lending Process
(CI Event – Mar 2018)

The Farm Credit “Customer Journey” Value Stream

Focus of CI Event

- Business mission, five strategic objectives, goals
- Process ownership, objectives, and market differentiator (Unique Selling Proposition, or USP)
- Culture, core competencies, and management style

CI Event Storyboard

“The Herbie”

- Typically conducted in parallel to other closing activities
- 60% of consumer loan process time
- Numerous forms of waste
**D - Define**

**Appraisal Process**
*(Current State)*

**"The Herbie"**

**Causes**
- Role responsibilities
- Technology limitations
- # Handoffs
- # Reworks
- # Rush requests

**Mean** = 37 days  
**Median** = 36 days  
**StdDev** = 23 days
DMADV

A - Analyze

DFSS Event (May 2018)
Integration of DFSS Tools

A - Analyze

VOC
What is valued?

Kano
How much Is it valued?

QFD
How to Provide Value?

Process Design
Who does what, and when?
DMADOV

M - Measure

VOC Survey (Performance Requirements)

Rate the **IMPORTANCE** of the following requirements for the appraisal process

<table>
<thead>
<tr>
<th>Importance</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How important is receiving status or progress updates?</td>
</tr>
<tr>
<td>2</td>
<td>How important is timeliness for completing the appraisal process?</td>
</tr>
<tr>
<td>3</td>
<td>How important is it to have knowledgeable appraisers?</td>
</tr>
<tr>
<td>4</td>
<td>How important is it to have skilled appraisal support staff?</td>
</tr>
<tr>
<td>5</td>
<td>How important is it to limit contact / interaction with you during the appraisal process?</td>
</tr>
<tr>
<td>6</td>
<td>How important is the quality (complete and error-free) of the appraisal report?</td>
</tr>
<tr>
<td>7</td>
<td>How important is it for you to understand the flow of the appraisal process?</td>
</tr>
<tr>
<td>8</td>
<td>How important is responsiveness to your questions or needs?</td>
</tr>
<tr>
<td>9</td>
<td>How important is flexibility in scheduling the inspection date / time?</td>
</tr>
<tr>
<td>10</td>
<td>How important is an inquisitive interaction by the appraiser with you during the inspection?</td>
</tr>
<tr>
<td>11</td>
<td>How important is the credibility of the appraised value?</td>
</tr>
<tr>
<td>12</td>
<td>How important is it for customers to provide all minimum required documentation and information prior to the appraisal being requested?</td>
</tr>
</tbody>
</table>

Rate the **SATISFACTION** when the requirement is **met** / when it is **present** / or when it is **good**

<table>
<thead>
<tr>
<th>Satisfied</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How do you feel when status or progress updates are provided?</td>
</tr>
<tr>
<td>2</td>
<td>How do you feel when the timeliness for completing the appraisal process is good?</td>
</tr>
<tr>
<td>3</td>
<td>How do you feel when knowledgeable appraisers are provided?</td>
</tr>
<tr>
<td>4</td>
<td>How do you feel when skilled appraisal staff are present / available?</td>
</tr>
<tr>
<td>5</td>
<td>How do you feel when limited contact / interaction with you during the appraisal process is made?</td>
</tr>
<tr>
<td>6</td>
<td>How do you feel when quality (complete &amp; error-free) of the appraisal report is present / met / good?</td>
</tr>
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**Observation:**

You think you know your customers’ needs, but do you really?
Kano Model (Performance Requirements)

- Compares Satisfaction vs Performance
- Relative Importance
  - Basic Needs
  - Satisfiers
  - Delighters

Observation:
Team found it interesting that Credibility of Appraised Value was a Delighter and not Basic Need
QFD (Process Objectives)

What’s
• Performance Requirements

How’s
• Process Objectives

Observation:
QFD exercise benefitted by having all current state maps and analyses displayed on the room walls for team to consider
• To gemba or not to gemba…
QFD
(Weighted) Performance Requirements

Focus on what is truly important!

D – Delighter   S – Satisfier   M – Must Have
Process Objectives

Appraisal Process Design

Validate Objectives
- Will these objectives positively impact the current state process?

“The Herbie” Causes
- Role responsibilities
- Technology limitations
- # Handoffs
- # Reworks
- # Rush requests

A - Analyze
D - Design

Observation: SIPOC is a great tool to talk through objectives, and to draft up an initial process map

- High level design
- Process scoping tool
- Information map
- What needs to happen
- Who needs to do it
Future State Process

Appraisal Process Design (to Pilot)

- Detailed level
- Who is doing what, and when
- Captures
  - Workflow
  - Information flow
  - System interactions

**Observation:**
Aligning everyone in understanding who does what, and when is key to executing the Pilot
Appraisal Process Pilot

- 8 week pilot; 2 regions
- AMC Path
  - Internal Appraisal Team
- AMC Path
  - External Appraisal Company
- Weekly retrospectives

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>AMS (Internal)</th>
<th>AMC (External)</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Turn Time</td>
<td>Avg: 9.0 days (107 loans)</td>
<td>Avg: 17.0 days (48 loans)</td>
</tr>
<tr>
<td>Scalability</td>
<td>Utilize / Improve Existing Panel (ex – FCS Illinois)</td>
<td>Unwillingness to provide AMC panel</td>
</tr>
<tr>
<td>*Quality</td>
<td>On Par No Quality Reviews Conducted</td>
<td>On Par No Quality Reviews Conducted</td>
</tr>
<tr>
<td>Cost (estimated)</td>
<td>&lt;$ * $ Removed &gt;</td>
<td>$30K greater *Excludes 2 headcount</td>
</tr>
<tr>
<td>*Process</td>
<td>Significant more influence and control over AMS process management</td>
<td>Significantly less influence and control over AMC process management</td>
</tr>
</tbody>
</table>

*Key Process Design Objectives

<table>
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<tr>
<th>AMS</th>
<th>AMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain Complete &amp; Accurate Information</td>
<td>✓</td>
</tr>
<tr>
<td>Improve Appraiser / Property Assignment Process</td>
<td>✓</td>
</tr>
<tr>
<td>Reduce Opportunities for Rework</td>
<td>✓</td>
</tr>
<tr>
<td>Role Specialization / Skilled Personnel</td>
<td>✓</td>
</tr>
<tr>
<td>Set Expectation w/Customer</td>
<td>✓</td>
</tr>
</tbody>
</table>

*QFD derived process Objectives utilized In the Pilot Assessment
AMS Appraisal Process (Final)

AMS Appraisal Process eliminated “the Herbie”

- Specialized - Roles and responsibilities
- Reduced - Technology limitations
  - # Handoffs
  - # Reworks
- Eliminated - Rush requests

Observation: Sustain the change through training and process governance
## Consumer Loan Turn Time Improvements

<table>
<thead>
<tr>
<th>Consumer Region</th>
<th>Pilot</th>
<th>Jan - Jul 2018</th>
<th>Aug - Sep 2018</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Indiana</td>
<td>AMC - External</td>
<td>57.7</td>
<td>37.9</td>
<td>-19.8</td>
</tr>
<tr>
<td>2 - Ohio</td>
<td>AMS - Internal</td>
<td>58.8</td>
<td>39.1</td>
<td>-19.7</td>
</tr>
</tbody>
</table>

**Appraisal Process Pilot Results**

- Directionally positive
  - Both Pilot regions reduced consumer loan process turn time
- Further analysis warranted to isolate appraisal process specific improvements
  - Consumer Operations Team – Additional concurrent role specialization enhancements
## Successes

<table>
<thead>
<tr>
<th>Objective</th>
<th>Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>Individual skills and experience using VOC, Kano, QFD, Process Mapping, SIPOC, Pilot, Retrospectives</td>
</tr>
</tbody>
</table>
| Process            | • Dedicated focus on “the Herbie”  
                     • Process design                                                   |
| Business Segments  | Consumer Lending results created demand for Agricultural Lending improvements |
| FCMA Association   | New business capability to affect an improved customer experience (DFSS: DMADOV) |
| Customer           | • VOC provided path to influence process re-design  
                     • Significantly improved customer experience!                   |
## Next Steps

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Consumer Lending Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>4Q2018</td>
<td>Staff &amp; train (internal) Appraisal Management Services (AMS) Team</td>
</tr>
<tr>
<td>4Q2018</td>
<td>Implement AMS Appraisal process across Rural 1st consumer lending</td>
</tr>
<tr>
<td>1Q2019</td>
<td><strong>O</strong> - Optimize - Technology enablement opportunities</td>
</tr>
<tr>
<td>1Q2019</td>
<td><strong>V</strong> – Verify – Assess process performance with technology enhancements; close project</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Schedule</th>
<th>Agricultural Lending Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 2018</td>
<td>Conduct initial CI event – Map the end-to-end Ag Loan Process; Identify DFSS opportunities</td>
</tr>
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</table>
Create Waves of Excellence

• How does your organization listen to customers?
• How are you integrating VOC needs to affect an exceptional customer experience?
• How are you exploring ways to innovate in process design?
• What difference is it making?
• Is it having a positive effect on your bottom line?
Thank You!
Your opinion is important to us!
Please take a moment to complete the survey using the conference mobile app.

Session No: ThS/48
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