Unleashing the Power of Data:
The Coca-Cola Company’s Lean Six-Sigma Approach to Master Data Management

Darian L Worley | The Coca-Cola Company
What I Want to Leave You With

• Overview of The Coca-Cola Company
• Overview of GBS Global Data Services
• Insight into how we use Lean/Six Sigma and Winshuttle to:
  • Implement proactive Data Quality controls
  • Improve our Master Data processes
• Examples of how we are using Winshuttle at The Coca-Cola Company
The Coca-Cola Company
500 BRANDS

200+ COUNTRIES

3,500 PRODUCTS

1.9 BILLION SERVINGS PER DAY
24+ MILLION OUTLETS

The largest distribution system in the world

46 BILLION ANNUAL REVENUES

2014

83+ MILLION LIKES

#1 Brand on Facebook

129 YEARS OF REFRESHING CONSUMERS
20 Billion-Dollar Brands...
including three new brands!
GBS Global Data Services (GDS)
What is the role of GBS Global Data Services?

Global Data Services Mission

We efficiently and effectively deliver high-quality, reliable master data that our clients confidently leverage to generate business value.
Where do we Operate?

Service Delivery Centers

- Atlanta (ATL)
- Warsaw (WAW)
- Manila (MAN)
- Buenos Aires (BA)
How do we deliver value-driven Master Data Quality?

Standard Processes and Activities

- Manage
- Secure
- Share
- Profile
- Maintain
- Deploy
- Build
- Design
- Control
- Standardize
- Align
- Archive
GBS Global Data Services Organization

Global Data Services Director

Manager (ATL)

Manager (ATL)

Manager (ATL)

Manager (MAN)

Supervisor (ATL)

Supervisor (WAW)

Supervisor (BA)

Supervisor (ATL)

Supervisor (MAN)

Leader (ATL)

Customer Vendor Banks

Customer Vendor Banks

Customer Vendor Banks

Finance Global Codes
GTIN/UPC Materials

Finance BPP
Customer Vendor Banks

Materials

Manager (ATL)

Manager (MAN)

Material

Finance

Employee

OE, CSE, Tools, Controls/Compliance, BCP, Data Quality, Portal, Process Integration
How Big is our Master Data Universe?

Master Data Population and Maintenance Volumes

2015 Year End

- **Customers**
  - 2.2 MM records
  - 187,000 change requests

- **Vendors**
  - 123,000 records
  - 13,000 change requests

- **Banks**
  - 125,000 records
  - 5,000 change requests

- **Bank Accounts**
  - 200,000 records

- **Materials**
  - 50,000 records
  - 12,000 change requests

- **GTIN & UPC Codes**
  - 14,000 records
  - 4,000 change requests

- **BPP Codes**
  - 111,000 records
  - 12,000 change requests

- **Finance Master Data**
  - 60,000 records
  - 3,600 change requests
The Case for Change
Framing the Conversation

GBS Global Data Services Productivity Trends

GBS Customer Data Maintenance
7 Year Cost Effectiveness Trend

- Transaction Volume: +1%
- Total Service Cost: -76%
- Cost Per Transaction: -79%

GBS Material Data Maintenance
7 Year Cost Effectiveness Trend

- Transaction Volume: +45%
- Total Service Cost: -34%
- Cost Per Transaction: -58%
Solution...

Use Lean Six Sigma and Winshuttle to Standardize & Automate Processes

- Implement “Smart-forms” with Active Data Governance
- Reduce process waste
- Implement end-to-end solution (Form, workflow & syndication) using One tool
TCCC OE (Lean Six Sigma) Methodology

DMADV: Process (Re-)Design

1. DEFINE
   - Define the need for the project and develop the project plan

2. MEASURE
   - Measure/understand customer needs and specify CTQs

3. ANALYZE
   - Analyze design concepts and develop high-level design

4. DESIGN
   - Develop the detailed design & control/test plan

5. VALIDATE
   - Validate/test design, implement full-scale processes and “maintain the gains”
Defined Project Objectives, Project Scope and Develop Project Plan

**Project Overview:**

The purpose of this project is to automate the Master data process

**Objectives:**

- **Cycle Time:** Reduction in end-to-end cycle time
- **Data Quality:** Reduction in the number of DQ errors
- **Risk Avoidance:** Reduction in access to SAP Transaction codes
- **Productivity:** Increase Productivity
- **Increase Client Satisfaction**
- **Reduce dependency on IT based on new and/or revised configuration programming needs**

**KPIs:**

- Cycle Time
- Data Quality
- Risk Avoidance
- Productivity

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**Project Name:** Automate Master Data Process (Version 2)

**Project Start and End Dates:**

- Start: May 9, 2016
- End: Jun 23, 2016

**Role:**

- Owner: Coca-Cola/Atlanta Operations
- Sponsor: Chief IT & Software Engineering

**Team Members:**

- Project Manager: (Names)
- Project Coordinators: (Names)
- Project Analysts: (Names)

**Background History:**

- Description of project history, any critical stakeholders, and any previous projects.

**Project Overview:**

- Define the Project
- Project Overview
- Objectives
- Scope
- Assumptions
- Dependencies
- Milestones

**Defined Objectives:**

- Cycle Time: Reduction in end-to-end cycle time
- Data Quality: Reduction in the number of DQ errors
- Risk Avoidance: Reduction in access to SAP Transaction codes
- Productivity: Increase Productivity
- Increase Client Satisfaction
- Reduce dependency on IT based on new and/or revised configuration programming needs

**KPIs:**

- Cycle Time
- Data Quality
- Risk Avoidance
- Productivity
Measure VoC

Identified Customer needs, specify CTQs and product/service requirements

Top Needs:
- Faster Cycle times
- Increase Productivity
- Increase Data Quality – Increase Right First time

Client Satisfaction
- Transparency
- User friendliness
- User Experience
Analyze the High-Level Design

Converted product/service requirements into process design requirements & establish a high-level design

Developed High Level Design

Conducted Design Review
- Reviewed Design with Key Stakeholders (internal & External)
  - Process maps
  - FMEA
  - Etc
- Updated high-level map based on feedback
- Obtained Sign-off
Design the Details

Develop, evaluate and select a detailed process/product design

Developed Detail Process Maps

Re-evaluate the Technology options
- Customize SAP
- Build “Homegrown” applications
- Evaluate 3rd party tools
- Continue with WS implementation

Evaluated and Refined the Design

Developed Enabling Elements & Business Requirements Document

Obtained Business Sign-off
Validate the Design

Assure the new design meets customers requirements, institutionalize it, and implement ongoing monitoring.

Test Solution and Confirm Benefits

Before

After

Time to Process in Days

Train and Fully Implement

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Monitor Ongoing performance
GBS Winshuttle Master Data Implementations
Winshuttle: A Suite of Tools

Integrated web-based process utilizing Forms, Validation, Workflow and SAP integration

- Electronic structured data capture
- Forms are validated using business rules and SAP rules prior to moving to the next step
- Request details are used to automatically create records in SAP
- Requests are routed appropriately based on business scenario
Winshuttle Implementations

Material Master Data (MM01)
• Global Ingredient Pilot Phase I (forms, workflow & syndication to P08)

Customer Master Data
• North America Customer Lotus Notes Replacement Phase I (forms & workflow)

Finance Master Data (FSS0 & FSP0)
• Global GL Account Phase I (forms, workflow & syndication to P08)

Cross-Domain Processes
• Global Data Standards Request Process Phase I: Automate the data standards request process for Material & Customer: (forms, workflow & syndication to SharePoint)
Material Master Data

Global Ingredient Process: Form, WF and Syndication to SAP

Legacy System: SAP MDM (WF) & Excel

Winshuttle: InfoPath

Excel Attachment (Form)
Customer Master Data

Customer Master Data: Forms and WF

Legacy System: Lotus Notes DB

Winshuttle: InfoPath

![Winshuttle: InfoPath](image_url)
GL Account

GL Acct Extension to Company Code: Form, WF and Syndication to SAP

Legacy System: SAP MDM

Winshuttle: InfoPath

GL Account Extension to Company Code

Requestor Name: Dylan L. Worley
Requestor ID: M8420871
Request ID: 01260005517
Request Date: 2015-11-06 10:37:39

Extend GL Account Number: 
Account Description: 
Account Group: 

Account Currency: 

REFERENCE COMPANY CODE
GL Account

GL Acct Change at Co Code Level: Form, WF and Syndication to SAP

Legacy System: SAP MDM

Winshuttle: InfoPath

![Image of GL Account Change at Company Code Level form]
GL Account

GL Main Account/Sub-Account Request: Form and WF

Legacy System: SAP MDM

Winshuttle: Composer
GL Account

GL Alternative Account Create: Form, WF and Load to SAP

Legacy System: Excel & MS Outlook

Winshuttle: Composer
GL Account

GL Alternative Account Change: Form and WF

Legacy System: MS Outlook

Winshuttle: Composer

[Image of Winshuttle interface for GL Alternative Account Change Request]
Data Standards

Data Standards Request Process

Legacy System: MS Word and MS Outlook

Winshuttle: Composer
Value Proposition

- Building a knowledge repository and rules management system
- Enabling process and data standardization
- Active Data Governance – proactive vs. reactive data interrogation
- Strengthening and reinforcing controls
- Improving Productivity
- Increasing data quality and integrity
- Increasing Client Satisfaction – Improved user experience & fewer rejections
- Business developed and owned solutions – Integration with SAP without programming need
- Upgradeable and expandable tools
Lessons Learned

• Crawl, walk, run strategy
• Close collaboration with Winshuttle
• Business driven initiatives that require support and input from other departments
  • IT support
  • Audit and Compliance
  • Business Requirements
• 3rd Party SAP bolt-on connectivity
• Infrastructure and database performance management
• Future Winshuttle, SharePoint, and Microsoft Office upgrades
• Effectively creating a “mini” IT organization within the business
Next Steps

Material Master Data
• North America Phase II: Ingredient & Package material types (forms, workflow & syndication to P08 – MM01)
• CPS Pacific: Deploy workflow solution for Materials, BOMs, Recipes and BCP (workflow)

Customer Master Data
• North America Customer Phase II: Automate the data load process for Customer master data (syndication to P07)

Finance Master Data
• Global GL Account Phase II: Automate the end-to-end process for main/sub Accounts (forms, workflow & syndication to P08)