



Major Food & Beverage Company

Driving Quality & Efficiency Across Diverse
Manufacturing Environments Through
Standards-Based Plant Applications
Implementations



Agenda

- Company Overview
- Overview of Manufacturing IS
- Relationship with GE
- Corporate Driven Implementations
- Plant Driven Implementations

Company Overview

- Diverse products – food mixes and spreads, beverages, and more
- More than 20 plants in North America
- Various technologies across plants – including acquired locations/technologies

Vision Statement

Balanced growth through:

- Increased market share of our brands
- Acquisition of other leading food brands
- New products that provide convenience and nutrition



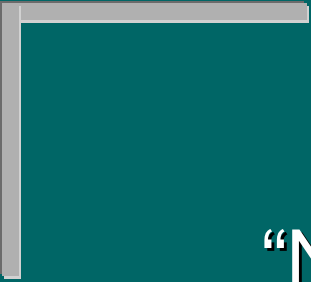
Plant Systems

- Our goal is to provide value by partnering with the business to deliver applications that reduce cost, increase quality, and streamline operations
- Systems Responsibility
 - Formulation
 - Item Specification
 - Product Lifecycle Management
 - Plant Maintenance
 - Proficy Plant Applications
 - » Efficiency
 - » Quality
 - » Production Management (Genealogy)
 - Manufacturing Execution Systems

Partnering with GE Fanuc



- Started using Proficy Plant Applications about five years ago to support a merger
- Company has identified Plant Applications as the corporate standard for Efficiency, Quality, & Genealogy data collection
- Approximately half of North American plants are now using the Efficiency & Quality modules
- Starting Genealogy pilot this summer



“No organization can depend on genius; the supply is always scarce and unreliable. It is the test of an organization to make ordinary human beings perform better than they seem capable of, to bring out whatever strength there is in its members, and to use each man’s strength to help all others perform better. The purpose of an organization is to enable common men to do uncommon things.” – Peter F. Drucker



Corporate Driven Implementation Model Overview

- Roles & Responsibilities Model
- Systems Piloted/Delivered
 - Quality
 - Process Reliability Monitoring



Corporate Driven Implementation Model – Roles & Responsibilities

- Business Owner
 - Drives the business case
 - Defines the problem to solve
 - Dedicates the business resources needs to succeed
 - Defines priority

- Business Super User
 - Drives functional requirements
 - Defines necessary reporting
 - Validates configuration decisions
 - Builds training material
 - Parallel configuration



Corporate Driven Implementation Model – Roles & Responsibilities

- IS Role
 - Partner with business to understand, drive, and deliver business case
 - Define the infrastructure need at each location to support Plant Apps
 - Initial configuration
 - Reporting Development



Corporate Driven Implementation Model *Systems Piloted*

- Quality Pilot
 - Holds Management
 - » RM Receiving
 - » Lab Testing
 - » Integration from Item Specification System
 - » Integration to downstream production, and inventory systems
 - » FG Release
 - HACCP Compliance Monitoring
 - » Time based Auto log for HACCP checks
 - » eSignature for compliance



Corporate Driven Implementation Model *Systems Delivered*

- Process Reliability
 - Calculation = $(\text{Amount Produced} * \text{Scheduled Run Time}) / (\text{Target Rate} * \text{Scheduled Run Time})$
 - Other Factors
 - » Time scheduled but not running
 - » Weekend work
 - Implemented Manually at 8 plants and automated at 2 plants
 - Auto log to collect production variables
 - Efficiency Display to collect downtime events



Plant Driven Implementation Model - Overview

- Roles & Responsibilities Model
- Systems delivered
 - Efficiency Tracking
 - Quality Management
 - Recipe Download
 - Environmental (Waste Water Monitoring)

Plant Driven Implementation

Model *Roles & Responsibilities*

- Plant Business Owner
- Plant project Owner
- Plant Controls Engineer
- Plant Application Specialist
- Corporate IS: Plant Systems
- Corporate SQMS Group
- Corporate Facilitator
- Plant Operator

Plant Driven Implementation Model Methodology

- Project Orientation
- Pre-Workshop Preparation
- Pilot Workshop
- Pilot Workshop Go-live
- Realign / Refine resources
- Admin Training
- Technical Training
- Operating Training
- Mass Data Gathering and Configuration
- Mass Data Gathering and Configuration Go-live

Plant Driven Implementation Model

Systems Delivered

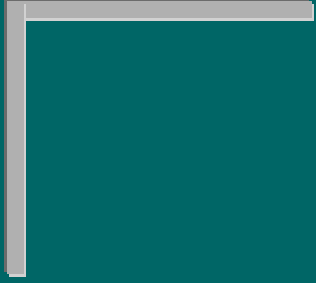
- Efficiency
 - Multiple lines across facilities
 - Collect data from various sources on the shop floor through Proficy Historian
 - Scheduled reports used for team pre-shift meetings
- Quality
 - Collecting Data to support raw material receiving
 - » Truck Inspection
 - » Certificate of Analysis (COA) validation
 - » Fill Weight Collection



Plant Driven Implementation Model

Systems Delivered

- Recipe Download to Support Line Operation
 - Downloading recipe data like temperature settings, and conveyor speeds from Plant Applications to controls through iFix
- Environmental Monitoring
 - Track pH levels at our waste water treatment facility
 - Assist in determining how much water the facility actual used based on amount monitored in the facility



Questions

