

American Italian Pasta Company

Different Today with Aras Innovator



Summary

- Who is AIPC
- Challenges & Complexity
- Selecting ARAS
- Phased Approach
- Success Stories
- Future Efforts



American Italian Pasta Company

AIPC is a division of Ralcorp Holdings, a leading producer of private label (or store brand) foods. AIPC is the largest producer of dry pasta in North America. A leading supplier of private label and store brand dry pasta, AIPC also manufactures and markets several of the top regional pasta brands in the U.S. AIPC produces over 300 pasta shapes in five manufacturing plants in the U.S. and Italy.



Challenges & Complexity (problem)

- Product Specifications
 - Everywhere Data
 - Multiple & Conflicting Data
 - Customer Quality Service
- Consumer Affairs Complaints
 - Lack of Access & Visibility
 - Inefficient Real-Time Entry
 - Unreliable Legacy System



Customer Information & Interaction

- Names, addresses, and phone numbers in multiple places
 - ERP system, eMail system, smart phones, personal planners, etc.
 - Synchronization of data across all sources (arduous at best)
 - This would include associations between companies and individuals
- Little or no traceable data with respect to customer interaction
 - eMail, VMX, meetings, phone calls, complaints, internal memos requests for . . .
 - data not in a single location
- Relational Capital
 - Power Map
 - Client intelligence and converting that to revenue & success



What is PLM (Product Lifecycle Management)

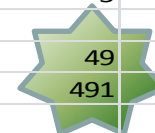
- All Encompassing Effort
- Involves People & Resources
- Define & Execute Processes (methods & procedures)
- Using Software & Tools
- Manage Data (structured & unstructured)
- About Products & Services
- From Inception to End-of-Life
- Covers entire enterprise with collaboration of customers & suppliers



Selecting Aras Innovator

- Specification Management
- Consumer Affairs
- Technology
- Workflow
- End User Flexibility

Master Specification Management				
<u>Consideration</u>	<u>Vendor 1</u>	<u>ARAS</u>	<u>Vendor 3</u>	
Attachment / Document Management	5	5	0	
Category / Flag	5	5	0	
Certifications	5	4.75	0	
Integration	3.5	4.75	0	
Quality Measures	3.75	5	0	
Reporting & Analysis	5	4.25	0	
Security	5	5	0	
Supplemental	4.75	5	0	
Technology	5	5	5	
Workflow	5	5	0	
TOTALs	47	49	5	
Weighted Totals	464	491	0	



Phased Approach

2010												2011												2012											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Software Evaluation & Selection

Phase I

- Master Specifications & Reports
- Consumer Affairs Complaints & Reports

Phase II

- FAQs / SARRs
- Documents Management
- Images & PDF Management
- Quality Manual
- Supplier Management & Complaints
- Additional Workflow

- Regulatory Document (HCAAP, Audits, etc.)
 - Customer Documents (GMO, MSDS, etc.)
 - ARAS System Operations

- Supplier Complaint (AIPC Internal)
 - Packaging Proof Review (AIPC Internal)

- CDC Press Specification from ARAS
 - CDC Packaging Specification from ARAS
 - Rendering LX data with ARAS

Phase III

- Packaging Specifications
- Italy Master Specifications & Reports
- Press & Packaging Profiles
- CDC & LX Systems Integrations

We are Here

Phase IV

- Customer Performance Portal
- Commercialization Workflow (ComDoc)
-

2010												2011												2012											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec



Solution

Aras Innovator is an integrated framework providing a platform for data management with orchestrated processes, support for multiple owners, and ability to support reporting.

Carton Item
 Item Number: 45324
 Item Description: 45324 (1) 100% WHOLESALE
 Item Extra Description: 45324 (1) 100% WHOLESALE
 Item No.:
 Label: 45324 (1) 100% WHOLESALE
 RUC Code: 100% WHOLESALE
 Item Type: 100% WHOLESALE
 Item Class: 100% WHOLESALE
 Item Category: Packaging
 APC Country: 100% WHOLESALE
 Group Tech Code: 100% WHOLESALE
 Group Tech Code 2: 100% WHOLESALE

Shelf Dimensions

Length	Width	Height
22.500	11.250	5.000

Weight: 0.054

QR Code: [Image]

Barcode: [Image]

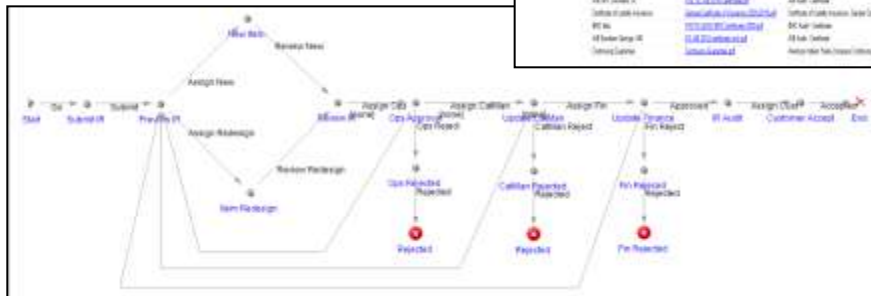
Financial Overview

3D Pie Chart: [Image]

Map of North America: [Image]

Text description: [Image]

Item	Description	Quantity	Unit	Price	Total
45324	45324 (1) 100% WHOLESALE	1000	EA	0.054	54.00
45324	45324 (1) 100% WHOLESALE	1000	EA	0.054	54.00
45324	45324 (1) 100% WHOLESALE	1000	EA	0.054	54.00



American Italian Pasta Company

Product: 45324 (1) 100% WHOLESALE

Barcode: [Image]

Quantity: 1000

Price: 0.054

Total: 54.00

Barcode: [Image]

Bacon Ranch Chicken and Pasta Skillet

Preparation Time: 10-15 min
 Cook Time: 20 min
 Serves: 5-10

Ingredients:

- 1 Tbsp vegetable oil
- 8 slices chicken cut or turkey bacon
- 1 lb boneless, skinless chicken breasts, cut into bite-size pieces
- 1 cup low sodium chicken broth
- 1 1/2 cups milk
- 2 Tbsp all-purpose flour
- 1 pkg (4 oz) original barbecue ranch dressing

Directions:

Heat oil in a large skillet over medium-high heat. Add bacon and cook until crisp. Remove bacon to paper towels; cool and crumble. Set aside.

Add chicken to the skillet and cook, stirring frequently, until chicken is brown on all sides. Add chicken broth to skillet and bring to a simmer. Reduce heat to maintain a simmer and add milk. Cook, covered, stirring frequently for 15 minutes or until pasta is done. In a medium bowl, whisk together milk, flour and ranch dressing packet. Add to pasta and cook, stirring frequently, until slightly thickened. Sprinkle with bacon. Serve.

Notes: Add 5 Roma tomatoes, sliced. Add the tomatoes along with the bacon, just before serving.

[Image of the dish]

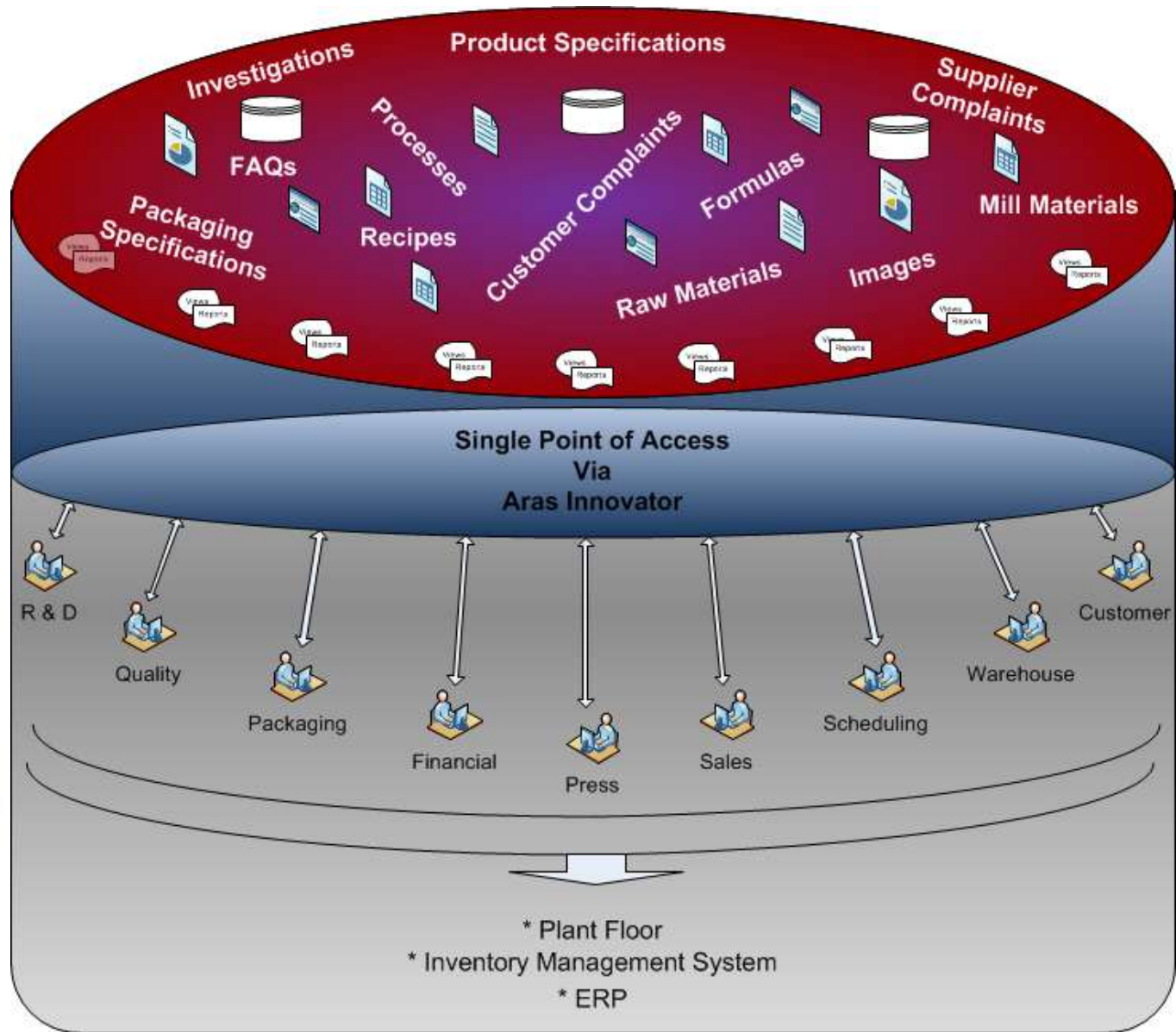


Success Stories

- **Specifications Management** (VP Quality)
 - 60% reduction in SARR product information requests
 - 40% reduction in SARR request processing cycle-time
 - From 11.2 hrs to 1.67 hrs for SG Spec change-over requests
- **Customer Complaints** (VP Marketing)
 - 40% reduction in time spent managing data
 - Increase in support activities for analysis & research
- **Customer Performance** (Dir IT & Infrastructure)
 - *Enable a consistent single point of view for all customers and support the rollup of KPIs across multiple multi-level hierarchies*
 - *Eliminate 4 man hours of report preparation per customer per week*
 - *Continuous and near real-time access to product performance data affecting service delivery ([link](#))*



Formula & Product Management Today



Product Specifications Challenge

Master R&D Data Base

Analyze / Think / Implement

Storage Conditions

Transit Conditions

AIB Audit Info

BRC Audit Info

FPA Audit Info

HACCP Info (by plant)

Allergens

AIPC Contact Info

External Contact Info

Specifications (AIPC)

Specifications (Supplier)

Analysis of Product

Cooking Instructions

ReCall Information

Proof of Insurance

Letter of Guarantee

Kosher Certificate

Organic Certificate

Country of Origin Labeling

Surveys (Compare to NBE)

Nutritional Info

Chinese Ingredient Surveys

Micro Assay / Limits

Manufacturing Facility Information

GMO Statement

Packaging Dimensions

Product Dimensions

Sensory Details

Date Code Explanations

Shelf Life

Pictures of Packaging

Pictures of Products

Bioterrorism Letter

MSDS (Material Safety Data Sheet)

Applicable Claims (health)

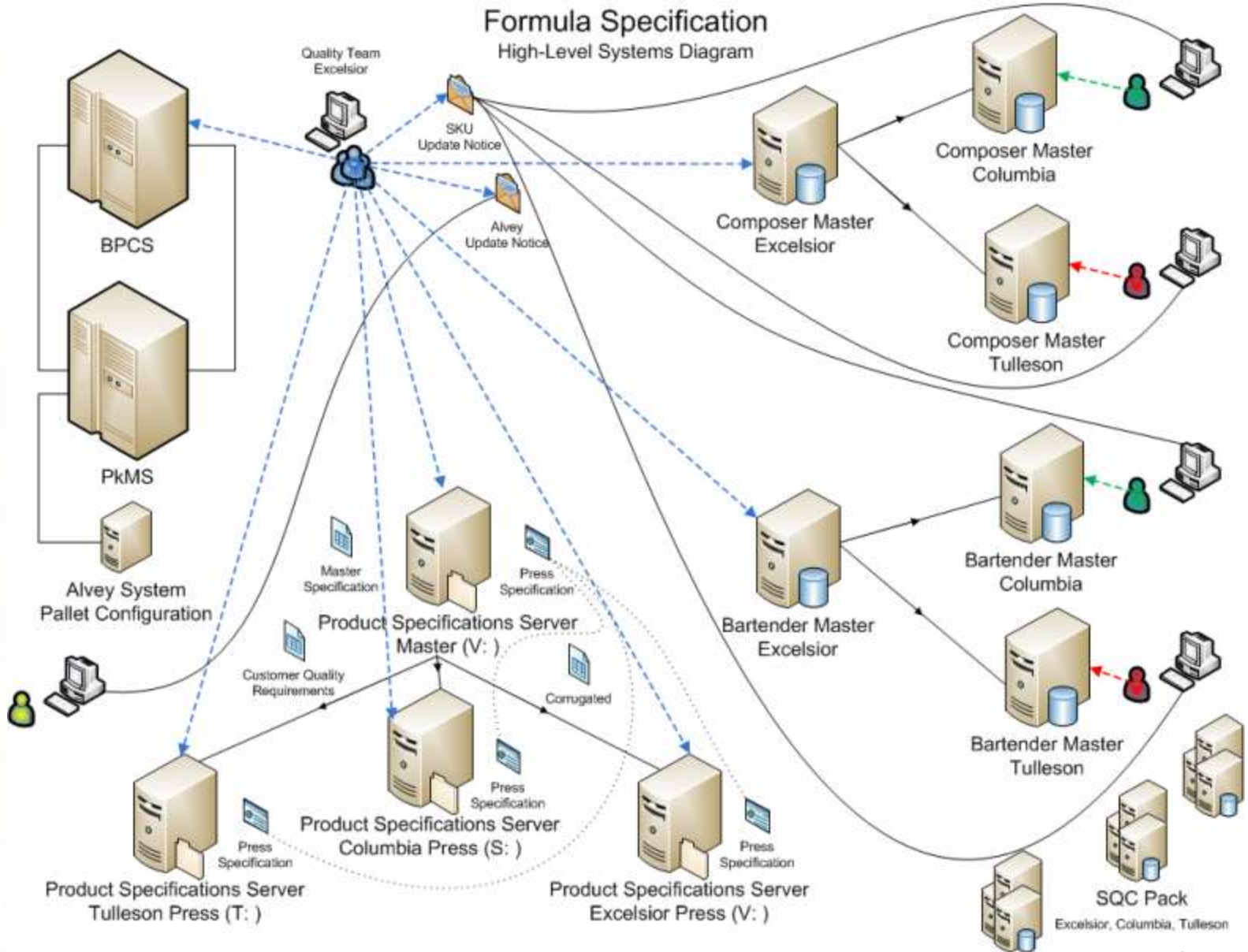
Label Reviews

CA Prop 65

Confidentiality Agreements



Formula Management of Specs



ARAS - Master Specifications

Finished Goods Channel Mix

Channel	Count
Retail-1813	1813
Food Service-214	214
Industrial-101	101

Item Master Mix

Item Type	Count
Box	~10
Carton	~10
Finished Good	~10
Flour	~10
Raw Material	~10
W/P	~10

Formula, Cook Time, & Die Counts

Category	Count
Formulas	294
Cook Times	74
Die	1407

MASTER SPECIFICATIONS:

Accurate specifications management is a major driver of product quality, cost and, ultimately, brand equity for today's consumer packaged goods, food and beverage manufacturers. Complex and important tasks like these are better realized by a product lifecycle management (PLM) platform than by a document management application.

Specifications are the descriptors of materials and processes, the collection of information that is required to produce, package and ship a product. A single product could have dozens of different specifications, from raw materials, recipes and formulas, to manufacturing processes, shipping and handling. In one, specification can proliferate exponentially across an organization, which increases costs and complexity.

Authorized throughout the new product development process, the value of specifications is increased when they are intelligently and dynamically related to one another. Changes to specifications, which frequently occur in most organizations, are accurately and automatically populated across all related specifications in the organization, and across the globe, thanks to the intelligent, real-time relational nature of the Siemens PLM platform.

Standardization becomes possible through global visibility and dynamic relationship of all specs. As a result, the number of specifications can be reduced without compromising brand promise. Commonization and rationalization of the raw material portfolio helps you leverage the sourcing supply base, simplify logistics and mitigate organizational complexity.

Map: View AIPC Plant Locations in a larger map. The map shows the United States, Canada, and Mexico with several plant locations marked by blue pins.

Google Charts & Google Maps



ARAS – Recipe Management

AIPC Friday, April 13, 2012 10:08 AM

File Edit View Search Actions Reports Tools Help

- Home
- Administration
- AIPC Controls
- Change Management
- Consumer Affairs
- Customer Performance
- DBD Controls
- Document Center
- Documents
- FAQ
- Images
- Master Specifications
- Mill Materials
- Packaging Specifications
- Portfolio
- Recipe Management**
- Standard Solution Items
- Supplier

Consumer Segment

Dish Type

Skill Level

ARAS RECIPE MANAGEMENT

BACKGROUND:
AIPC has recipes on packaging, web, advertisements and literature. Recipes have been developed for branded and private label business. These recipes are housed in many different locations. AIPC recognized the need to centralize the recipes that have been developed so that authorized employees can have access to them.

CURRENT STATE:
The recipes that are currently available in ARAS are AIPC branded packaging or branded websites and recipes that have been developed for the Brand refresh have been uploaded in ARAS. As photography needs arise based on packaging or other needs, a recipe photograph will be uploaded for said recipes. The photographs are for specific purposes and are not to be shared unless authorized by Marketing. As new recipes are developed for Branded and Private Label, those recipes will be uploaded to ARAS. There are many segmentations that can be used to search for recipes; (i.e. shape, formulation, number of ingredients, skill level, cuisine, cooking form, sku relationship, tested, etc.). When a recipe is selected, it can be printed or emailed in a read friendly format.

Links

- Anthony's ([Link](#))
- Ronco ([Link](#))
- Luxury ([Link](#))
- Mueller's ([Link](#))
- Pennsylvania Dutch ([Link](#))
- Golden Grain ([Link](#))
- Heartland ([Link](#))

Formulations

Active Recipe Images

Ready | Darryl Poore | aipcaras@aicpc.com | AIPC-Innovator | Messages: 1



ARAS - Packaging Specifications

AIPC Friday, April 13, 2012 10:07 AM

File Edit View Search Actions Reports Tools Help

- Home
- Administration
- AIPC Controls
- Change Management
- Consumer Affairs
- Customer Performance
- DBD Controls
- Document Center
- Documents
- FAQs
- Images
- Master Specifications
- Mill Materials
- Packaging Specifications**
- Portfolio
- Recipe Management
- Standard Solution Items
- Supplier

Box Item Status

Active (315)

To Be Replaced (7)

To Be Discontinued (13)

Carton Item Status

Active (1008)

To Be Replaced (148)

To Be Discontinued (137)

Film Item Status

Active (403)

To Be Replaced (127)

To Be Discontinued (78)

Images for Active Items

Items With Images

Items Without Images

Waste Hierarchy

BACKGROUND:

Packaging is the science, art, and technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of design, evaluation, and production of packages. Packaging can be described as a coordinated system of preparing goods for transport, warehousing, logistics, sale, and end use. Packaging contains, protects, preserves, transports, informs, and sells.

PACKAGING DEVELOPMENT CONSIDERATIONS:

Package design and development are often thought of as an integral part of the new product development process. Alternatively, development of a package (or component) can be a separate process, but must be linked closely with the product to be packaged. Package design starts with the identification of all the requirements: structural design, marketing, shelf life, quality assurance, logistics, legal, regulatory, graphic design, end-use, environmental, etc. The design criteria, performance (specified by package testing), completion time targets, resources, and cost constraints need to be established and agreed upon. Package design processes often employ rapid prototyping, computer-aided design, computer-aided manufacturing and document automation.

With some types of products, the design process involves detailed regulatory requirements for the package. For example with prepackaged foods, any package components that may contact the food are food contact materials. Toxicologists and food scientists need to verify that the packaging materials are allowed by applicable regulations. Packaging engineers need to verify that the completed package will keep the product safe for its intended shelf life with normal usage. Packaging processes, labeling, distribution, and sale need to be validated to comply with regulations and have the will being of the consumer in mind.

Sometimes the objectives of package development seem contradictory. For example, regulations for an over-the-counter drug might require the package to be tamper-evident and child resistant; These intentionally make the package difficult to open. The intended consumer, however, might be handicapped or elderly and be unable to readily open the package. Meeting all goals is a challenge.

Package design may take place within a company or with various degrees of external packaging engineering, independent contractors, consultants, vendor evaluations, independent laboratories, contract packagers, total outsourcing, etc. Some sort of formal Project planning and Project management methodology is required for all but the simplest package design and development programs. An effective quality management system and verification and validation protocols are mandatory for some types of packaging and recommended for all.

Above content sourced from Wikipedia: 12/8/2011
Revised: 12/2011

Packaging Inquiries

Burned Dough	Day
Complaint	Day
Cook Time	Day
Cosity of Dough	Day
Date Code Questions	Day
Information Requested	Day
Insart	Day
Mixed Product	Day
Nutritional	Day
Other Marketing	Day
Package Size Smaller	Day
Preparation	Day
Recipe Requested	Day
Shelf Life	Day
Sticky/Starchy	Day
Storage	Day
Volume	Day
Website Inquiry	Day

Ready | Darryl Poore | apc-aras01@apc.com | AIPC-Innovator | Messages: 1



ARAS – Supplier Management

AIPC Friday, April 23, 2010 10:35 AM

File Edit View Search Actions Reports Tools Help

Home Administration APC Controls Change Management Consumer Affairs Customer Performance DBD Controls Document Center Documents FAQs Images Master Specifications Mill Materials Packaging Specifications Portfolio Recipe Management Standard Solution Items **Supplier** Contacts Supplier Supplier Complaints Supplier Plants

Suppliers Status and Type

The term **supply management** describes the methods and processes of modern corporate or institutional buying. This may be for the purchasing of supplies for internal use referred to as indirect goods and services, purchasing raw materials for the consumer during the manufacturing process, or for the purchasing of goods for inventory to be resold as products in the distribution and retail process.

In our organization, acquisition of goods is called purchasing or procurement. The supply management function of an organization is responsible for various aspects of these equities:

- Working with business leaders who have identified a business need or requirement to identify, source, contract, and procure the needed good or service from qualified suppliers.
- Managing supplier performance.
- The supplier relationship management process: a process for providing the structure for how relationships with suppliers will be developed and maintained.
- Economic theories of supply and demand.

Supply management is generally regarded as a systematic business process that includes more functions than traditional buying, such as coordinating inbound and internal production logistics and managing inventory.

Supply management deals primarily with the oversight and management of materials and services inputs, management of the suppliers who provide those inputs, and support of the process of acquiring those inputs. The performance of supply management departments and supply management professionals is commonly measured in terms of amount of money saved for the organization. However, managing risk is one of the other critical aspects of supply management; especially the risk of non-availability at the required time of quality goods and services critical for an organization's survival and growth.

Supplier Plants

Map Sat Ter Earth

United States Mexico

View 4PC Supplier Plants in a larger map

iCX Approval Status for Approved Supplier Plants

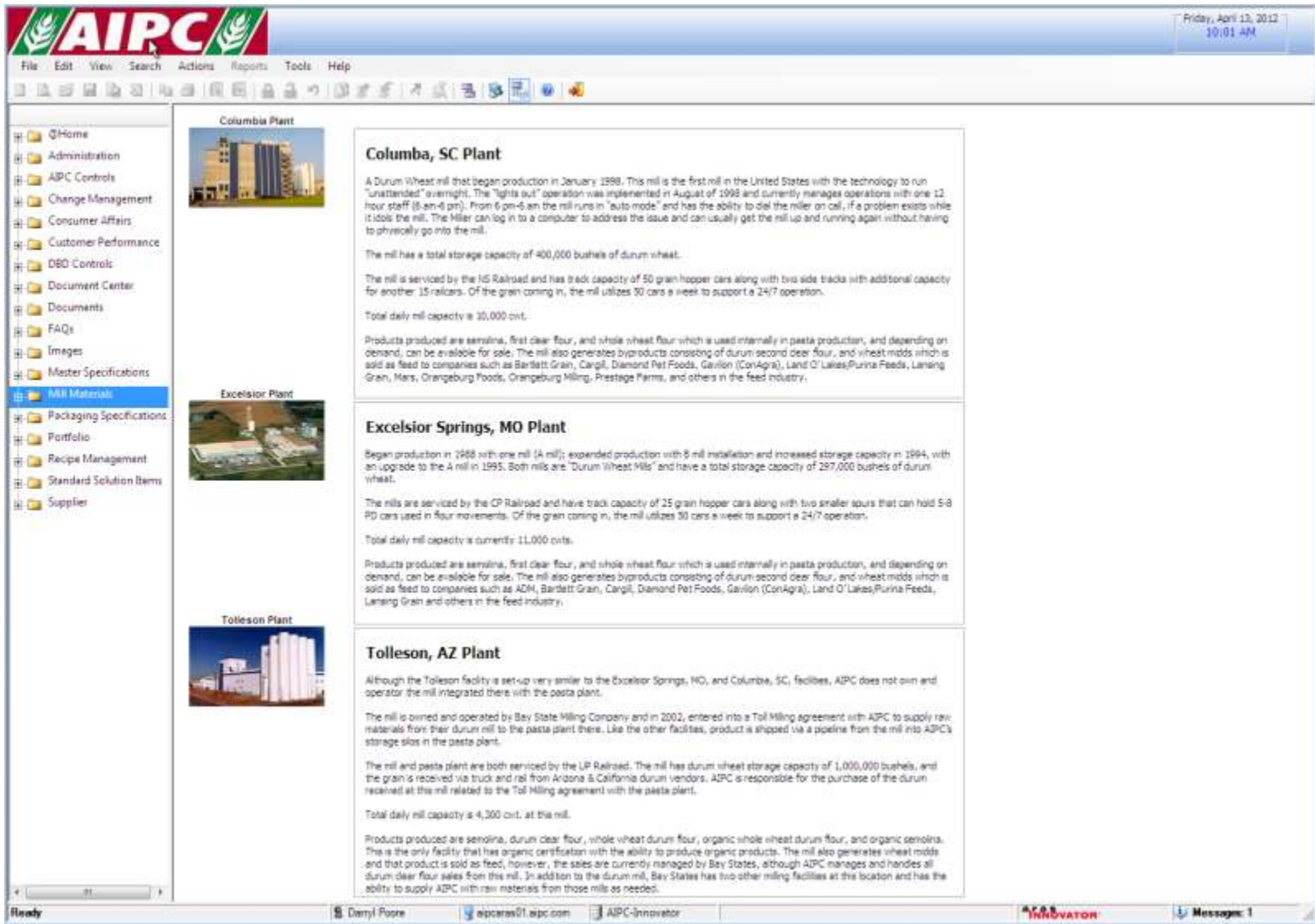

Supplier Complaint Type YTD

Food Security Risk Index 2011

Ready Darryl Foose apcaras01.apc.com APC-Innovator Messages: 1



ARAS – Mill Materials




AIPC

Friday, April 13, 2012 10:01 AM

File Edit View Search Actions Reports Tools Help

- Home
- Administration
- AIPC Controls
- Change Management
- Consumer Affairs
- Customer Performance
- DBD Controls
- Document Center
- Documents
- FAQs
- Images
- Master Specifications
- Mill Materials**
- Packaging Specifications
- Portfolio
- Recipe Management
- Standard Solution Items
- Supplier

Columbia Plant



Columbia, SC Plant

A Durum Wheat mill that began production in January 1998. This mill is the first mill in the United States with the technology to run "unattended" overnight. The "lights out" operation was implemented in August of 1998 and currently manages operations with one 12 hour staff (6 am-6 pm). From 6 pm-8 am the mill runs in "auto-mode" and has the ability to dial the miller on call, if a problem exists while it idles the mill. The miller can log in to a computer to address the issue and can usually get the mill up and running again without having to physically go into the mill.


The mill has a total storage capacity of 400,000 bushels of durum wheat.

The mill is serviced by the US Railroad and has track capacity of 50 grain hopper cars along with two side tracks with additional capacity for another 15 railcars. Of the grain coming in, the mill utilizes 30 cars a week to support a 24/7 operation.

Total daily mill capacity is 20,000 cwt.

Products produced are semolina, first clear flour, and whole wheat flour which is used internally in pasta production, and depending on demand, can be available for sale. The mill also generates byproducts consisting of durum second clear flour, and wheat midds which is sold as feed to companies such as Barlett Grain, Cargill, Diamond Pet Foods, Gavilon (ConAgra), Land O' Lakes/Purina Feeds, Lansing Grain, Mars, Orangeburg Foods, Orangeburg Milling, Prestage Farms, and others in the feed industry.

Excelsior Plant



Excelsior Springs, MO Plant


Began production in 1988 with one mill (A mill); expanded production with B mill installation and increased storage capacity in 1994, with an upgrade to the A mill in 1995. Both mills are "Durum Wheat Mills" and have a total storage capacity of 297,000 bushels of durum wheat.

The mills are serviced by the CP Railroad and have track capacity of 25 grain hopper cars along with two smaller spurs that can hold 5-8 PD cars used in flour movements. Of the grain coming in, the mill utilizes 30 cars a week to support a 24/7 operation.

Total daily mill capacity is currently 11,000 cwt.

Products produced are semolina, first clear flour, and whole wheat flour which is used internally in pasta production, and depending on demand, can be available for sale. The mill also generates byproducts consisting of durum second clear flour, and wheat midds which is sold as feed to companies such as ADM, Barlett Grain, Cargill, Diamond Pet Foods, Gavilon (ConAgra), Land O' Lakes/Purina Feeds, Lansing Grain and others in the feed industry.

Tolleson Plant



Tolleson, AZ Plant

Although the Tolleson facility is set-up very similar to the Excelsior Springs, MO, and Columbia, SC, facilities, AIPC does not own and operate the mill integrated there with the pasta plant.

The mill is owned and operated by Bay State Milling Company and in 2002, entered into a Toll Milling agreement with AIPC to supply raw materials from their durum mill to the pasta plant there. Like the other facilities, product is shipped via a pipeline from the mill into AIPC's storage silos in the pasta plant.

The mill and pasta plant are both serviced by the LP Railroad. The mill has durum wheat storage capacity of 1,000,000 bushels, and the grain is received via truck and rail from Arizona & California durum vendors. AIPC is responsible for the purchase of the durum received at the mill related to the Toll Milling agreement with the pasta plant.

Total daily mill capacity is 4,300 cwt. at the mill.

Products produced are semolina, durum clear flour, whole wheat durum flour, organic whole wheat durum flour, and organic semolina. This is the only facility that has organic certification with the ability to produce organic products. The mill also generates wheat midds and that product is sold as feed, however, the sales are currently managed by Bay States, although AIPC manages and handles all durum clear flour sales from this mill. In addition to the durum mill, Bay States has two other milling facilities at this location and has the ability to supply AIPC with raw materials from those mills as needed.

Ready Darryl Foore aipc@aras01.aipc.com AIPC-Innovator




AIPC **INNOVATOR** Message: 1

Consumer Affairs / Customer Complaints

TITLE: <i>Obtaining a new/LEAN customer complaint database</i>	DATE: 9-Jun-09	PROJECT LEADER: Julie Hale
TEAM MEMBERS: Bobbi Tackett, Dan Mahnken, Darryl Poore, Maria Koral	Project Sponsors: Jayne Hoover, Chrystal Johnson	

BACKGROUND INFORMATION

SCOPE: *Obtain a database that allows for company wide use and data retrieval. The major limitations of the current database are such that the process can become extremely inefficient and bogged down. There are 29 major limitations which primarily boil down to that the system is:*


+

Too small
+

Too cumbersome

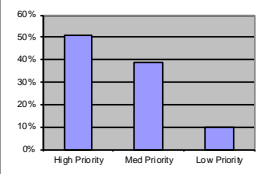
GOAL: *To eliminate the current limitations (listed above)*

TARGET: 1.) *To move from 30+ days required for closure to 1-5 days.*
2.) *To move from one person accessibility to multiple/levels*

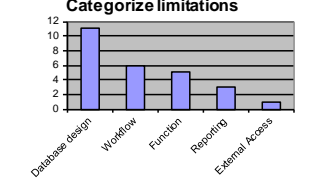
ANALYZE AND THINK

1. Review of the database limitations shows that more than 50% were considered critical, and another 40% as necessary for an adequate system.


Prioritize limitations



Categorize limitations




2. Purchase pre-designed system with built in reports, or build our own system and use separate reporting tool. **"Build vs. Buy"**




Purchase 'off the shelf' database?

OR




Build new database combined with reporting

MEASURE AND UNDERSTAND



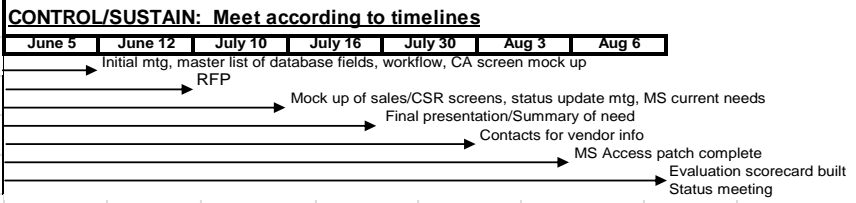
More than 25 different types of documents are used to gather and report information on a complete complaint file.



A swim map of the customer complaints process. Each starburst shows opportunity for improvement, primarily around database constraints.

IMPLEMENT

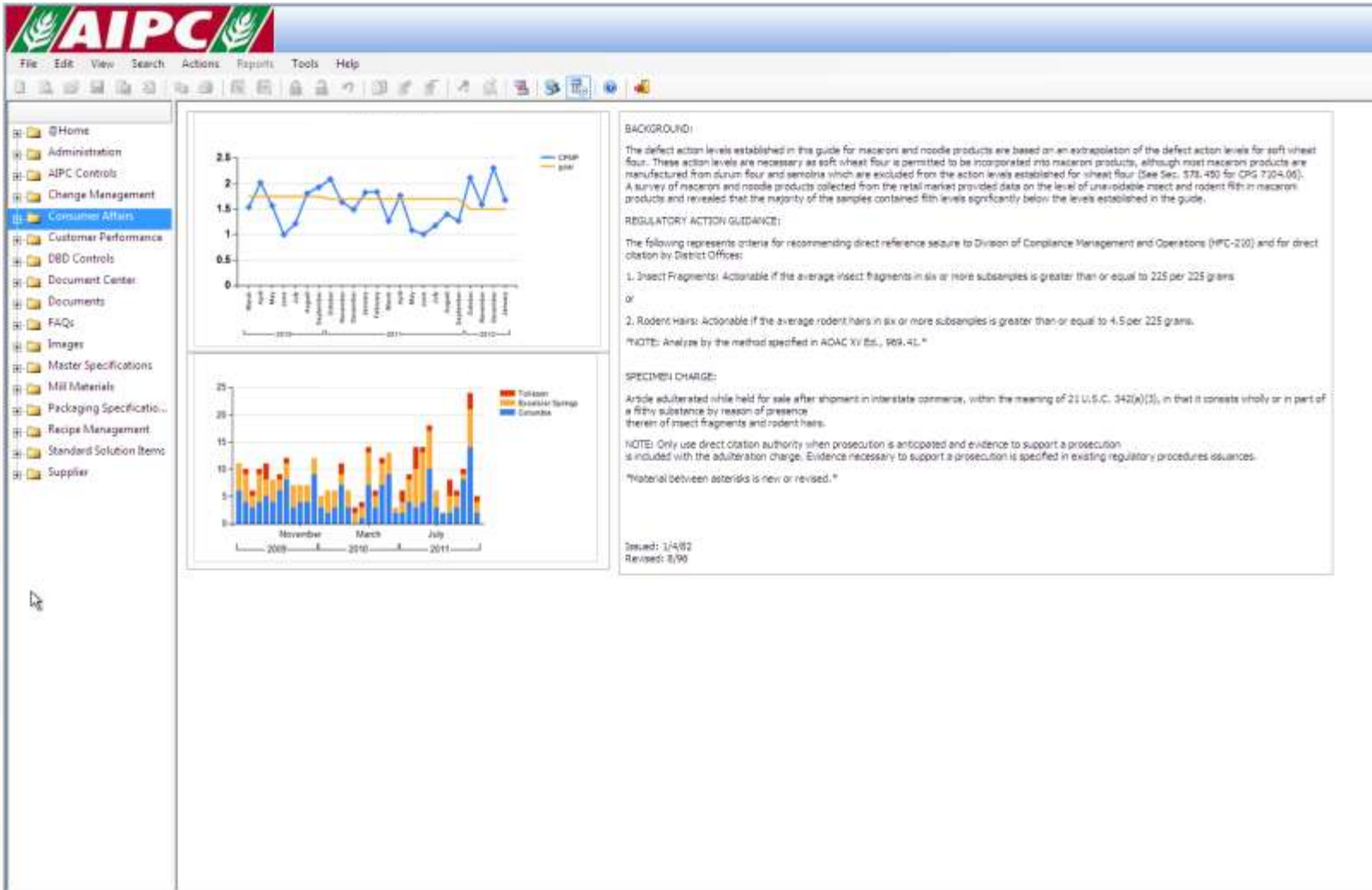
- 1.) RFP - Darryl & team June 11, June 12
- 2.) Identify possible systems, build or buy? - July 15th
- 3.) Evaluate & Demo - August 1st.
- 4.) Capital & Resource Plan - August 15th
- 5.) Create master list of database fields. What specific information do we want the database to hold and track? The current database has many 'nonsense' or unused fields. Need something that allows further drill down for better root cause analysis. - Julie/Dan/Shyla/Bobbi - asap
- 6.) Determine/document workflow requirements- Julie/Dan/Shyla/Bobbi -asap



VALIDATION BY PROJECT LEADER:	END DATE:
--------------------------------------	------------------



Consumer Affairs - Dashboard



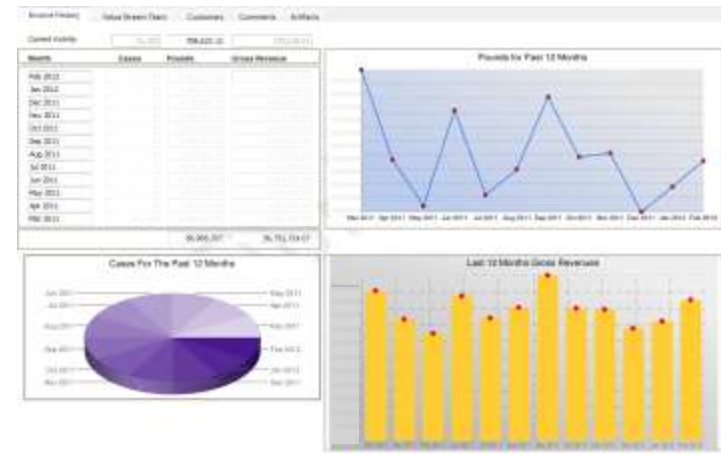
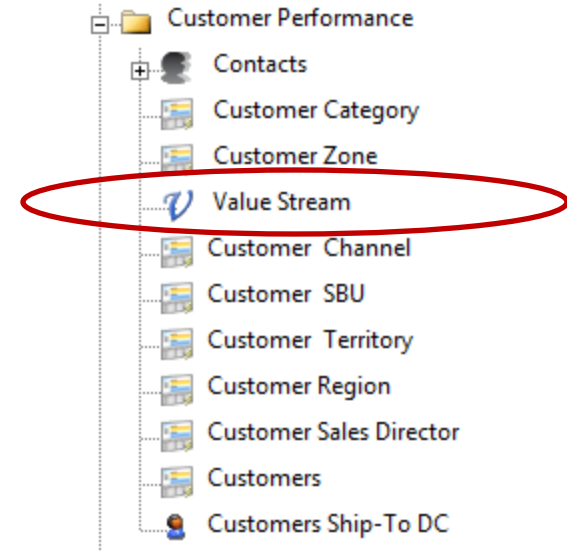
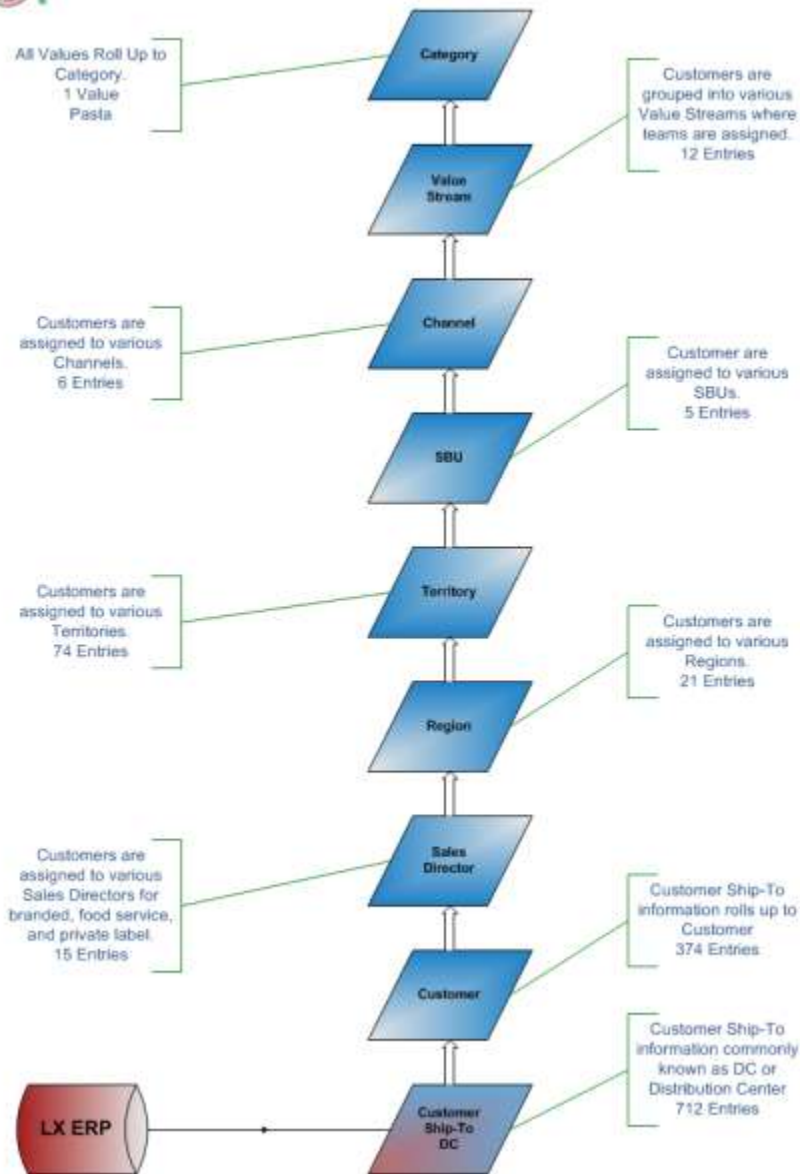
SQL Server Reporting Services



ARAS – Customer Performance



Customer Performance Portal



Results

- Aras is a framework that allows AIPC to tie business needs together in order to orchestrate an enterprise solution for sharing data, information, and process.
- Product Lifecycle Management is not just R&D. Successful product launches require multiple areas from marketing and the business to suppliers and customer in order to succeed.
- A consolidated view of the product and where it is in the lifecycle is important for measuring the status of the product.
- We have gained Executive level support and encouragement for sharing data through their individual teams to record activities and drive to automated and audited standard work processes.



Future State

Service Module Pipeline:

- Artwork Collaboration
- Business Intelligence Management
- Business Process Management
- Capital Appropriation Request
- CommDoc
- Customer Level Scorecard
- Die Management & Procurement
- Equipment Change-Over Management
- Idea / Innovation Management
- Packaging Supplier Complaints
- Program / Project Management
- Sample Management
- Shop Floor Capability Management
- Laboratory Information Management
- Trade Request Management (TPM)
- Nielsen Data Integration

Initiative Category:

- Go To Market
- Innovation / Cost Shift
- SG&A
- SG&A
- Cost Shift
- Go To Market / Innovation
- Cost Shift
- Cost Shift
- Go To Market
- Cost Shift
- Innovation
- SG&A
- Cost Shift
- Cost Shift
- Revenue Optimization
- Revenue Optimization



American Italian Pasta Company

Different Today with Aras Innovator

May 2, 2012

