

The Food Compliance Cloud™

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Selerant Corporation

November 15, 2012

Innovation in Food Safety and Compliance

Company Background



- PLM-New Product Development software company founded in 1990
- Web-based Enterprise Software Product launched in 2003
- Global presence
 - Dual Headquarters in New York, NY and Milan, Italy
 - Offices in France, Spain, Switzerland, UK and Shanghai, China and India
- Specialized in the unique product lifecycle management needs of process industries
- Profitable , innovative and privately held software solution provider with continuous investment in R&D and Quality and 35% annual growth
- Over 200 global customers
- Over 250 employees
- Extensive in-house Implementation Services Organization

Industries served

Food & Beverage

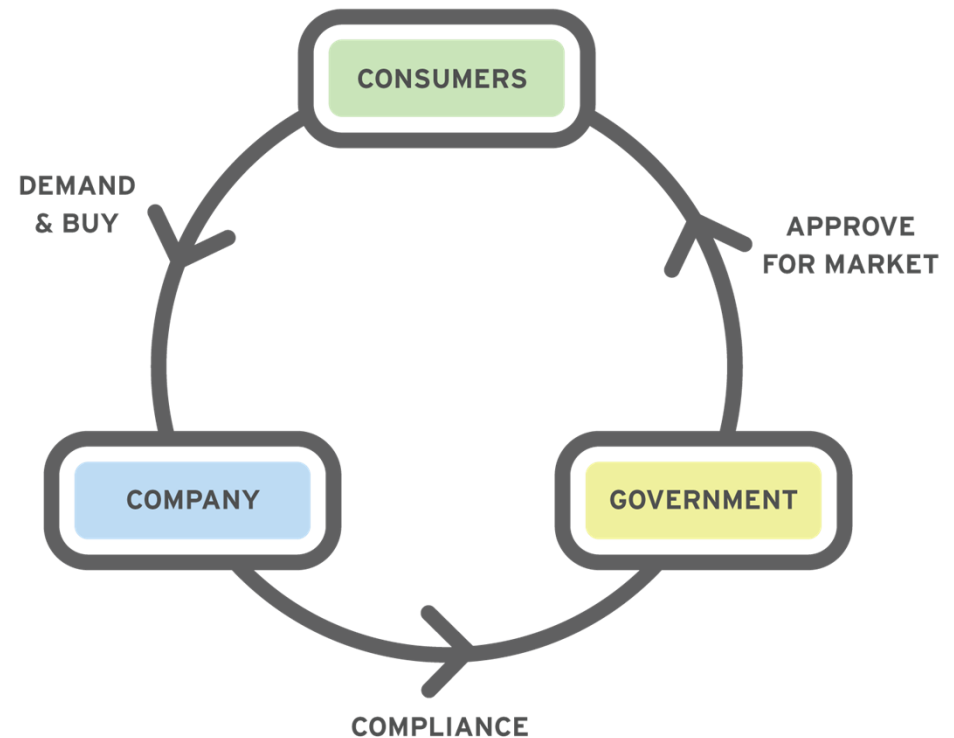
Cosmetics & OTC goods

Chemicals, Paint, Ink & Coatings



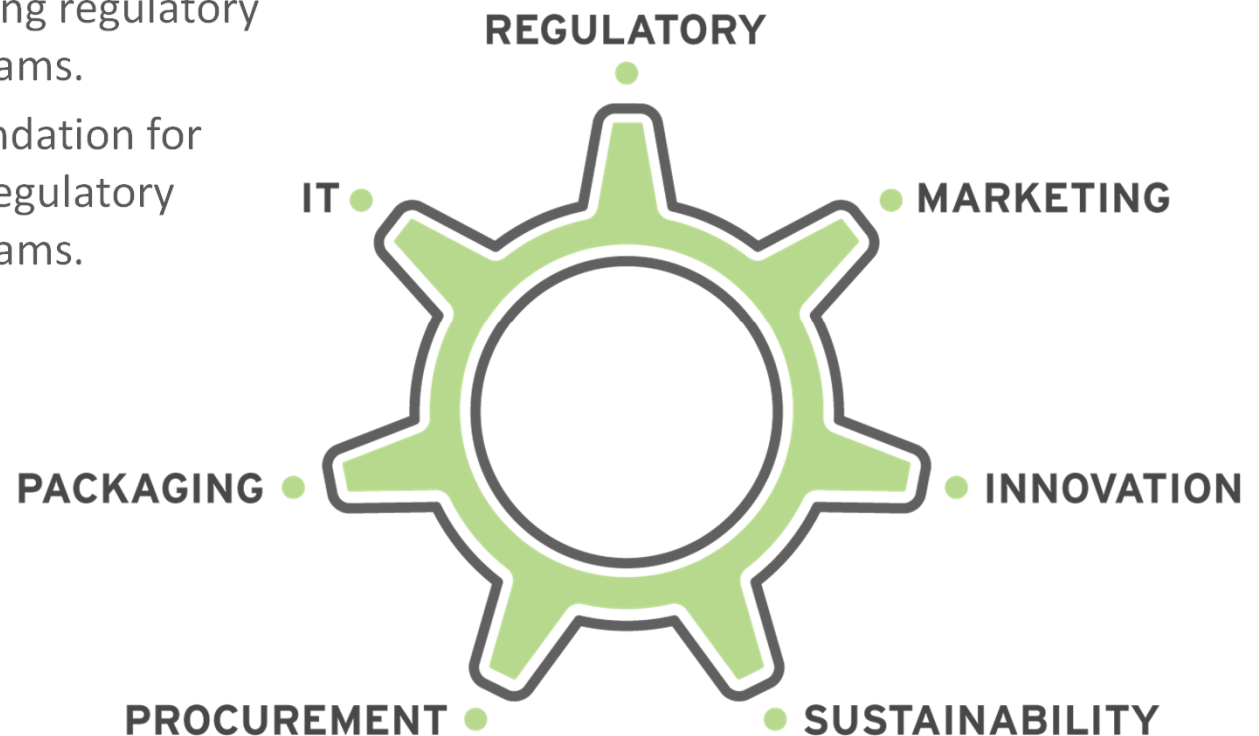
Industry Challenges for Regulatory Compliance

- Unpredictable consumers
- Supply-chain accountability
- Investor pressures
- Global compliance

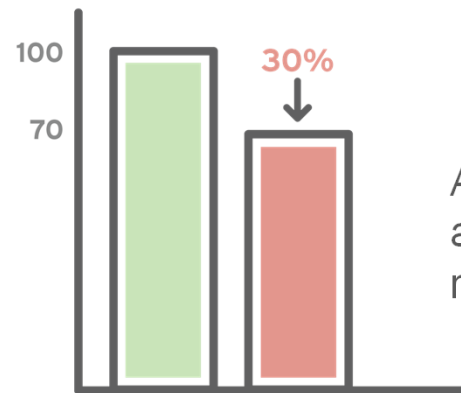


● The Food Compliance Cloud Supports...

- Strengthens existing regulatory compliance programs.
- Serves as the foundation for developing new regulatory compliance programs.

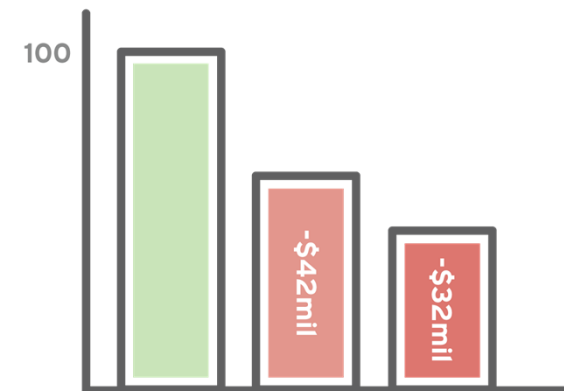


Cost of Noncompliance

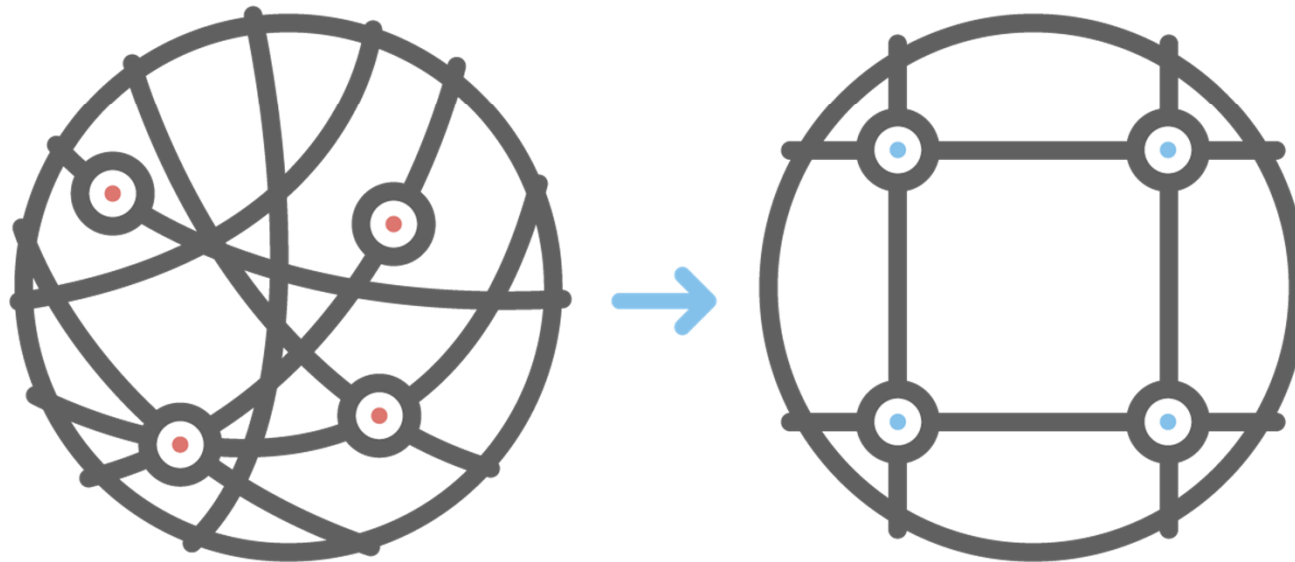


An E. coli outbreak at Jack in the Box cost the company approximately \$160 million in sales and 30 percent of its stock market value

Menu Foods Pet Food: \$42 million to pay for the recall, not including lost sales, plus \$32 million in settlements



For companies that have faced a recall in the past five years, 77% of respondents estimated the financial impact to be up to \$30 million dollars; 23% reported even higher costs. *GMA, October 2011*



Make Regulatory Compliance a Competitive Advantage
Solutions

● Selerant's Food Compliance Cloud™

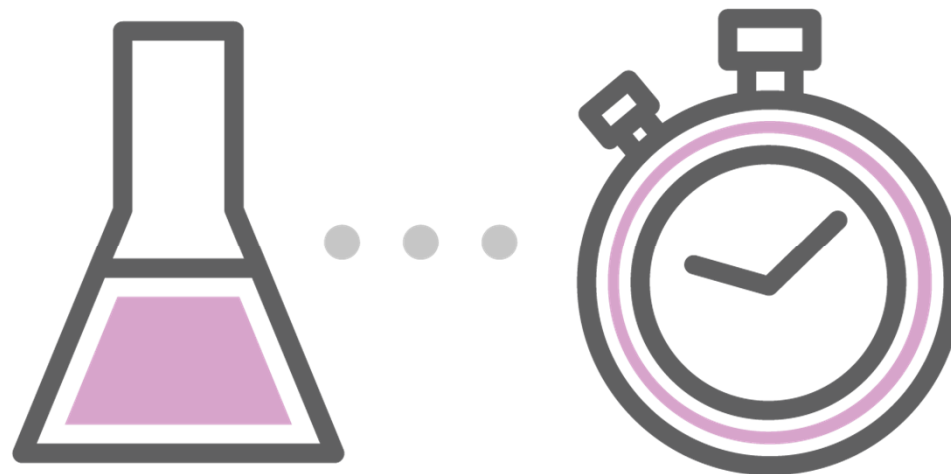
- Compliance by Design
 - Consistency of interpretation
 - Harmonisation of processes
 - Decrease time to market



Key Business Benefits of the Food Compliance Cloud™

Reduce Development Time

- ✓ Compliance checks that can be used throughout the product development cycle to identify and resolve compliance issues on a real-time basis.



Key Business Benefits of the Food Compliance Cloud™

Focus on strategic objectives

- ✓ Outsource tedious tasks (data collection, pre-validation, entry)
- ✓ On-demand access to regulatory data and legislation
- ✓ Dedicate more time to key regulatory issues



Key Business Benefits of the Food Compliance Cloud™

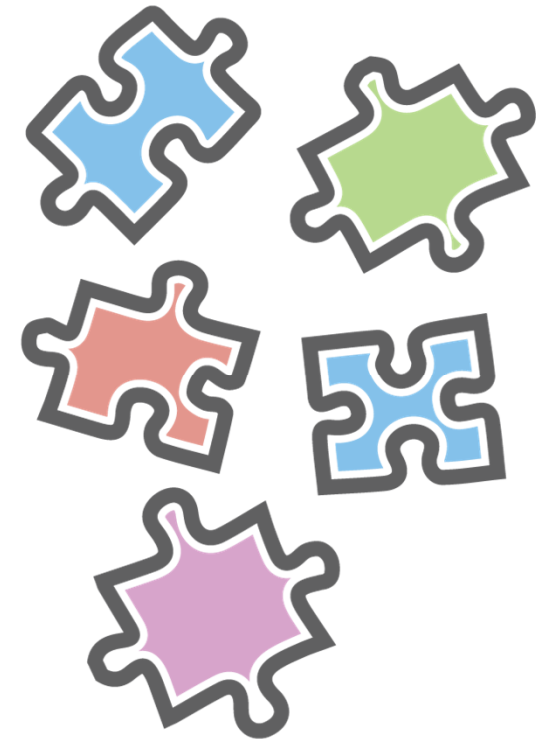
Control of regulatory data sets

- ✓ Accurate, validated and consistent interpretation of the regulations
- ✓ Supporting reports / regulation briefs sent on regular basis



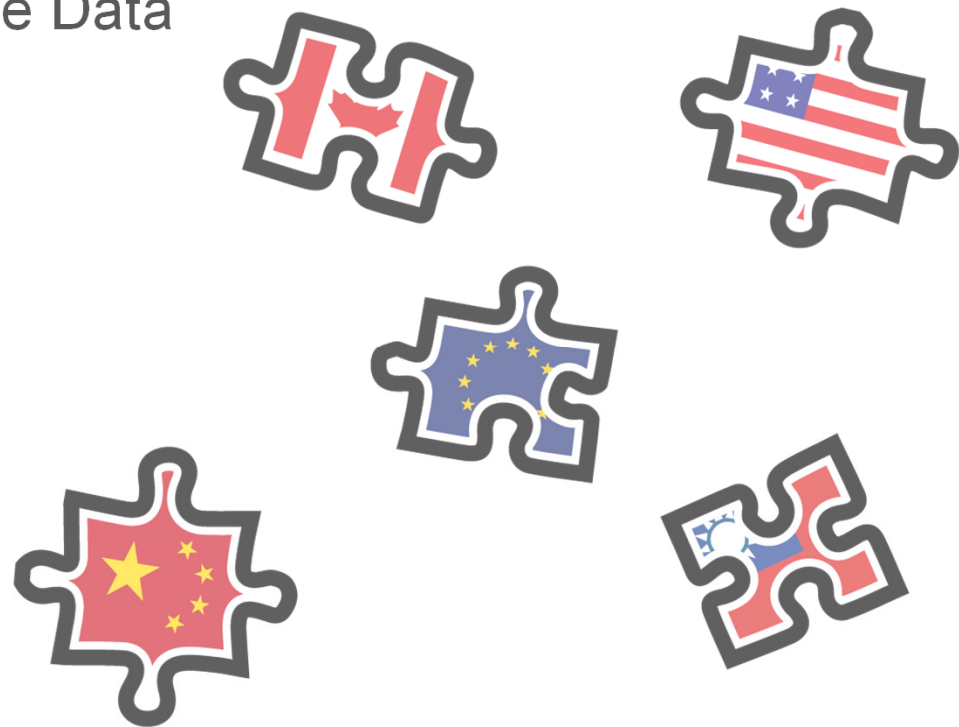
● Selerant's Food Compliance Cloud™

- The new toolbox for Regulatory Compliance
 - Global Food Additives Database
 - Global Food Impurities Database
 - Nutritional labeling
 - Nutrient content claims (FDA, USDA, EU)
 - Microbiological criteria
 - Food contact materials
 - PARNUTS substance list



● **Selerant's Food Compliance Cloud™**

- Food Additive & Pesticide Data
 - US FDA & USDA
 - Canada
 - European Union
 - Codex
 - China
 - Taiwan



Regulatory Compliance without The Food Compliance Cloud™

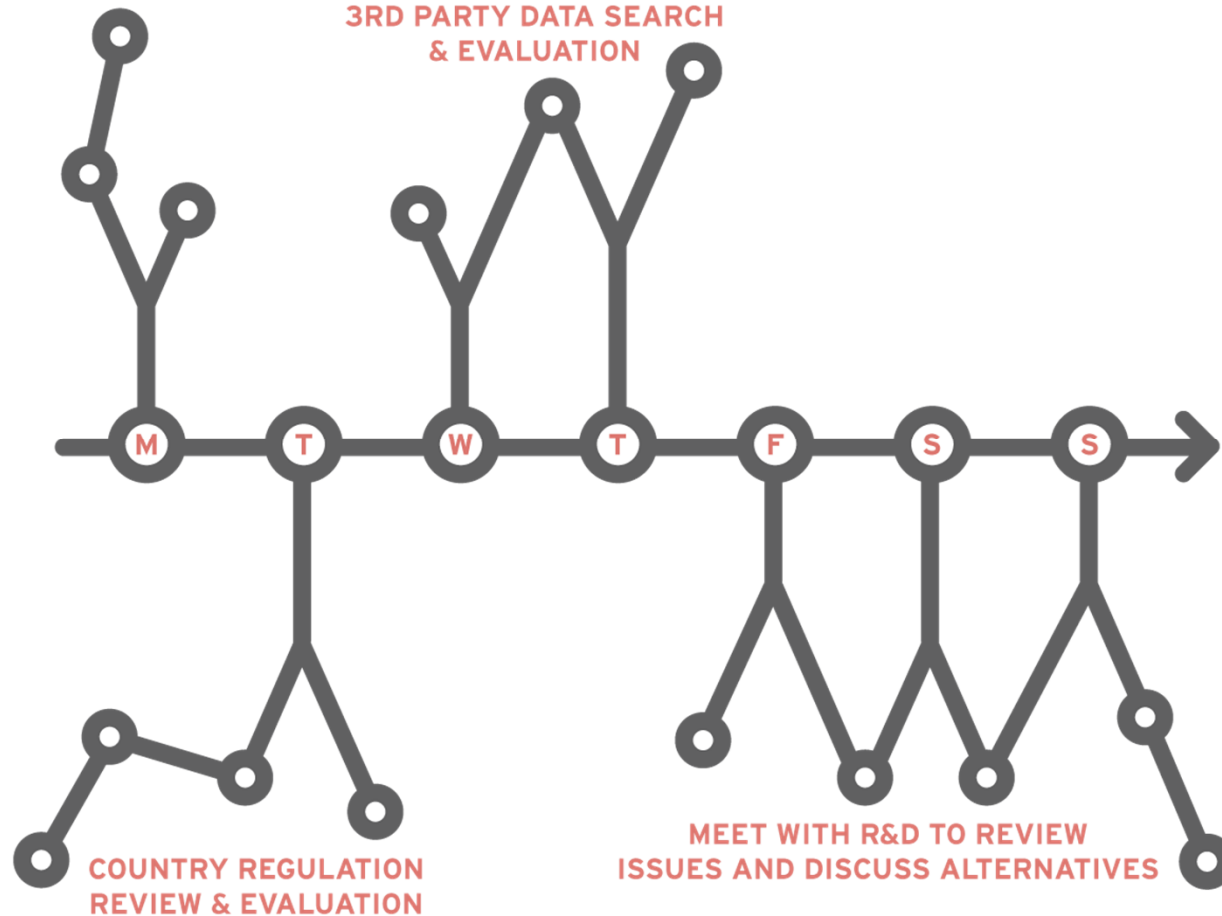
Can I sell Lemon/Lime Beverage #2 in the U.S., China and the European Union?



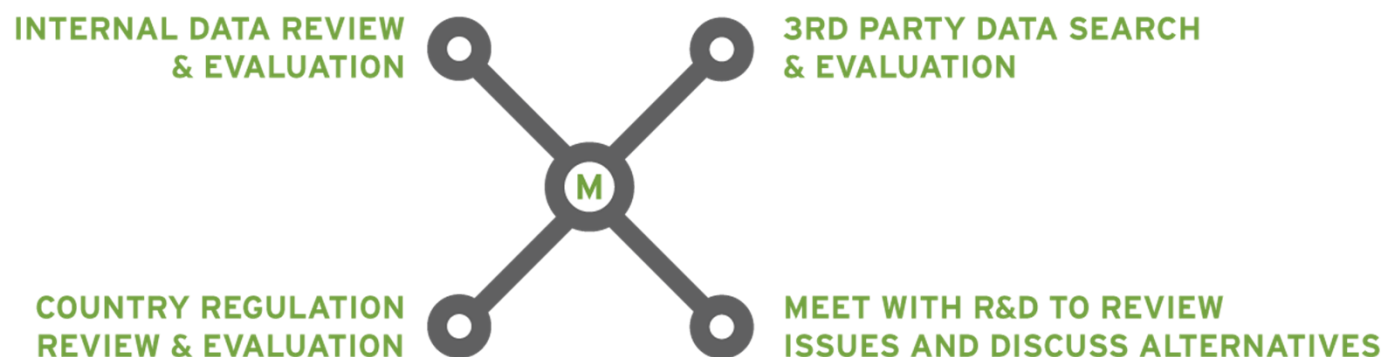
Regulatory Compliance without The Food Compliance Cloud™

INTERNAL DATA REVIEW
& EVALUATION

3RD PARTY DATA SEARCH
& EVALUATION

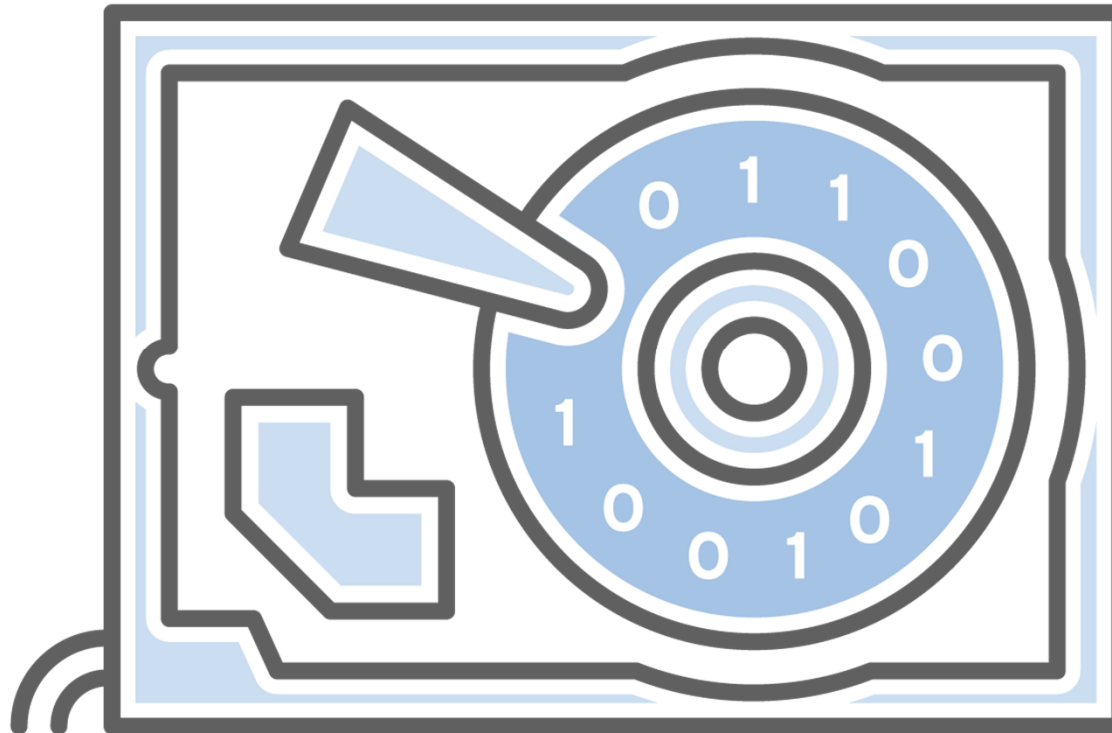


Regulatory Compliance with The Food Compliance Cloud™



Regulatory Compliance with The Food Compliance Cloud™

- Fully Integrated Knowledge Base
 - Search by material or country

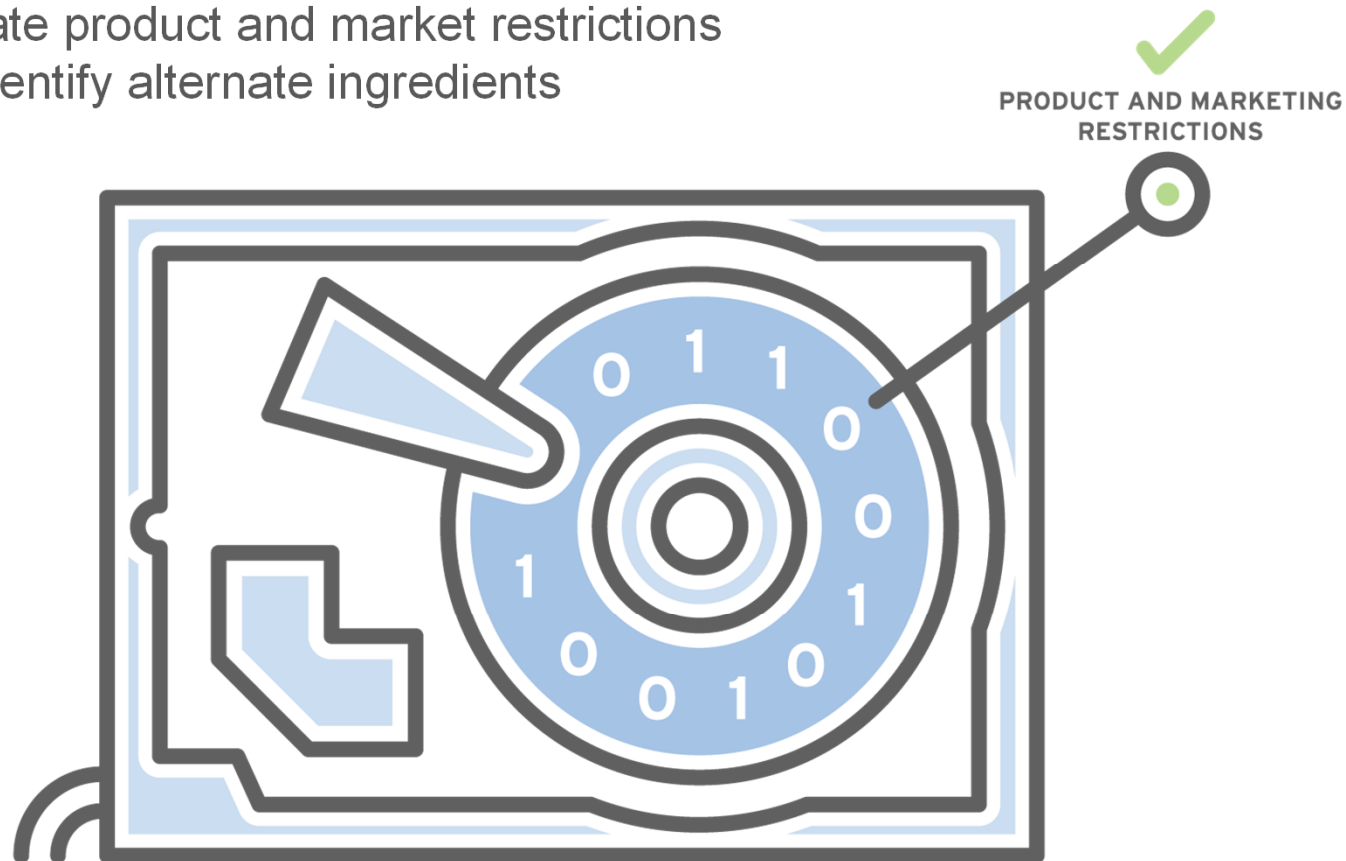


Actions ▾
Report
Guideline type for Codex Food Additives
➔
Total rows: 23

[illegible]

Regulatory Compliance with The Food Compliance Cloud™

- Fully Integrated Knowledge Base
 - Evaluate product and market restrictions
 - Identify alternate ingredients



Actions Reports Settings Go to

General Names Documents Regulatory Physical Restrictions Groups Reconstitution Mat Comparison Linked Materials

Restriction List Type Guideline type for Codex Food Additives Name Version

Actions Reports Copy Others | 1 / 2 Total rows: 23

| Application 1 | Application 2 | Application 3 | Application 4 | Restriction Type | Upper | UM | Function | V |
|---------------------|----------------------------------|--|--|--------------------|-------|---------|-------------|---|
| | | | | | | | | |
| All Food Categories | Bakery wares | Bread and ordinary bakery wares | Breads and rolls | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Bakery wares | Bread and ordinary bakery wares | Bread-type products, including bre... | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Bakery wares | Bread and ordinary bakery wares | Other ordinary bakery products (e.... | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Bakery wares | Bread and ordinary bakery wares | Crackers, excluding sweet crackers | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Cereals and cereal product... | Pastas and noodles and like product... | Pre-cooked pastas and noodles an... | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Confectionery | Confectionery including hard and so... | | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Confectionery | Cocoa products and chocolate prod... | Cocoa and chocolate products | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Confectionery | Chewing gum | | Limited in Formula | 400 | ppm ... | Antioxidant | |
| All Food Categories | Confectionery | Decorations (e.g., for fine bakery w... | | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Dairy products and analogu... | Condensed milk and analogues (pla... | Beverage whiteners | Limited in Form... | 100 | ppm ... | Antioxidant | |
| All Food Categories | Edible ices, including sherb... | | | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Fats and oils, and fat emulsi... | Fats and oils essentially free from w... | Vegetable oils and fats | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Fats and oils, and fat emulsi... | Fat-based desserts excluding dairy-... | | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Fats and oils, and fat emulsi... | Fat emulsions mainly of type oil-in-... | | Limited in Form... | 200 | ppm ... | Antioxidant | |
| All Food Categories | Fats and oils, and fat emulsi... | Fat emulsions mainly of type water-... | Fat spreads, dairy fat spreads and ... | Limited in Form... | 200 | ppm ... | Antioxidant | |

Regulatory Compliance with The Food Compliance Cloud™

Determine formulation compliance in seconds:





Formula: Generic plant / FO000129
[Material Search](#) | FO000129(NONE)

Actions ▾ **Reports** ▾ **Settings** ▾ **Go to** ▾



Refresh

Refresh the current page



Copy

Copy the currently selected material to a new Material



Change Code

Change the code of the material



Regulatory Calculation

Click here to launch a Regulatory Calculation



Approve Status Change

Approve the Materials Status Change

Specifications **Allergen Sources** **Nutritional Data**
UDF design view **DZLKK_MT_General - Attributes admin**

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |

Created By

Global Food Additives



1234Test

Lemon Cola

Overall Result
Comparison Result
Execution Mode
Execution On
Execution By

Failed
Same as previous calc
Standard
9/14/2012, 9:51:50 AM
DevEX Administrator

Input Parameters :

Food additives RSA guideline: USFOODADD1_CH_ADD 0
Country description: USA
Guideline type: GTYPE_US_ADDITIVES
Multicountry option: No

Summary Result :

Additives Restrictions: (List of Additives Components and their Restrictions.)

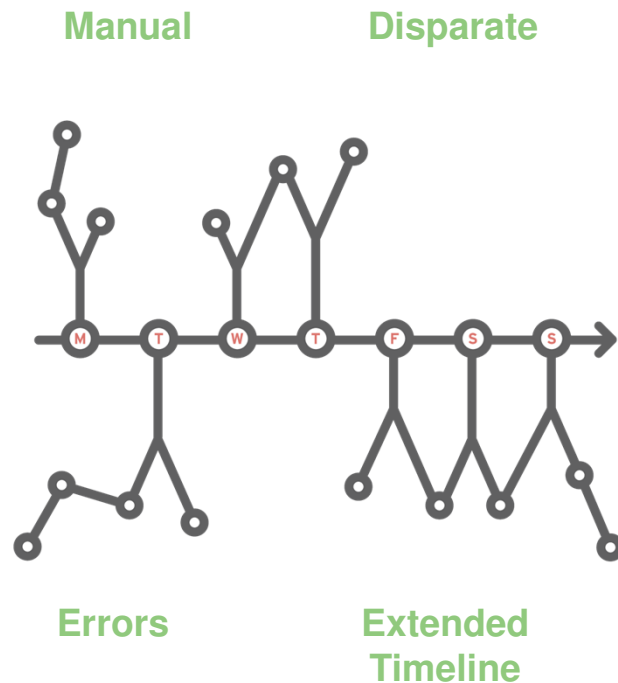
| Country | Application | Result |
|---------------|---|--------|
| UNITED STATES | All Food Categories | |
| UNITED STATES | All Food Categories; Beverages and beverage bases, Nonalcoholic ;Beverages, cola-type | |

Detailed Results :

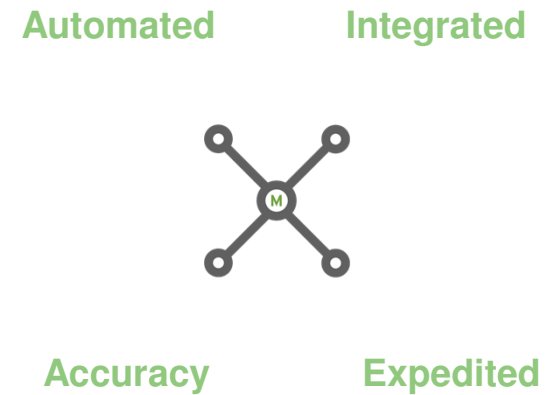
UNITED STATES - Guideline type US FDA Additives - Restricted (List of Restricted Components for the UNITED STATES - Guideline type US FDA Additives)

| Result | Substance name | Applications | Substance legislative Limit | Quantity in Formula | Substance Source | Legislation Notes |
|--------|----------------|---|-----------------------------|---------------------|---------------------|--|
| | GLYCERIN | All Food Categories | 100% (Multi-Purpose) | 25% | Glycerin | |
| | CAFFEINE | All Food Categories; Beverages and beverage bases, nonalcoholic; Beverages, cola-type | 0.02% (Multi-Purpose) | 5% | Caffeine | |
| | LEMON EO | All Food Categories | 100% (Flavoring Agent) | 3.25% | Lemon Essential Oil | |
| | TBHQ | All Food Categories | 100%(Antioxidant) | 3.25% | TBHQ | Alone or in combination with BHA and/or BHT. The total antioxidant content of a food containing the additive will not exceed 0.02 percent of the oil or fat content of the food, including the essential (volatile) oil content of the food. |

- Regulatory Compliance without the Food Compliance Cloud™



- Regulatory Compliance with the Food Compliance Cloud™

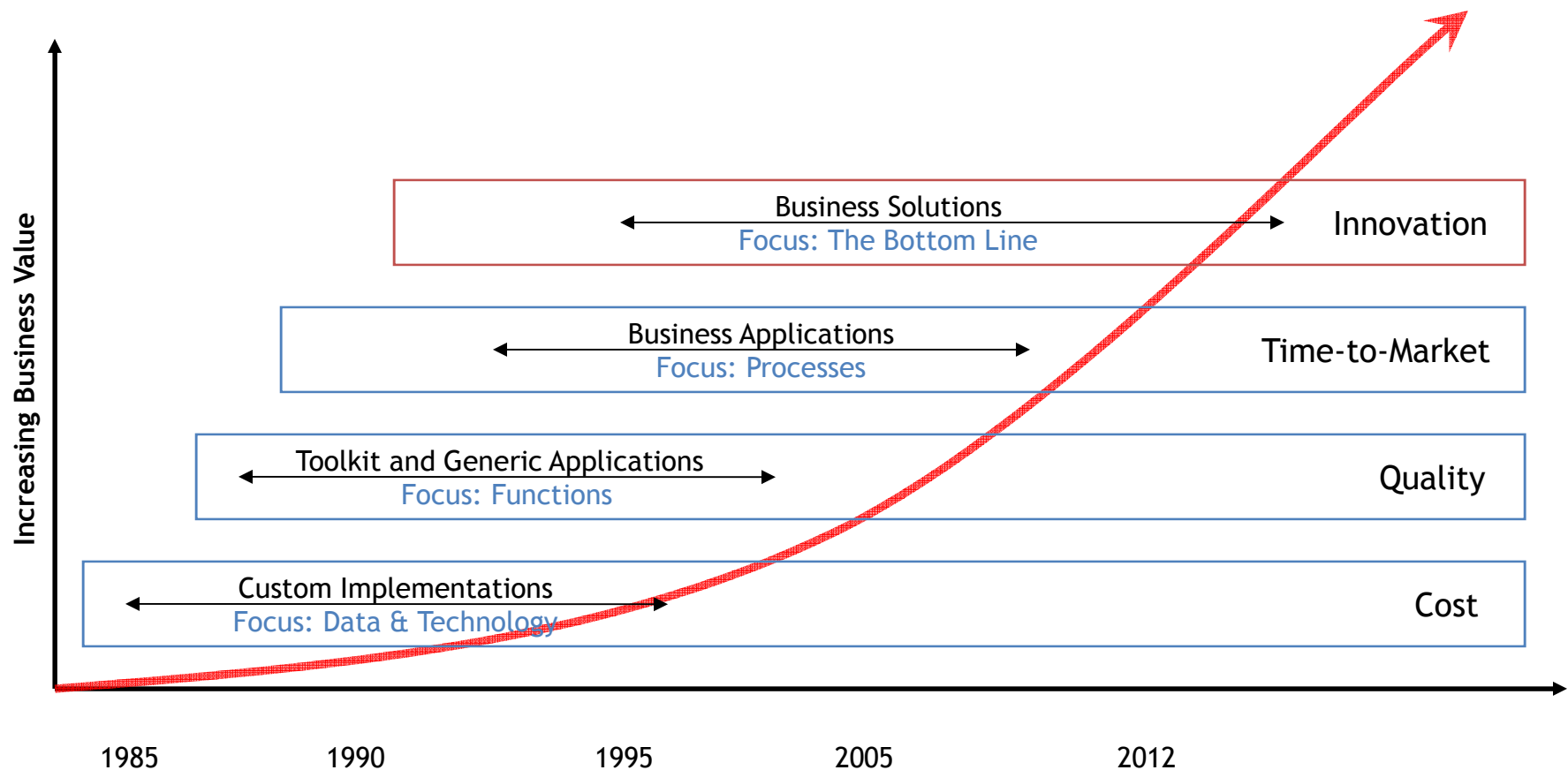


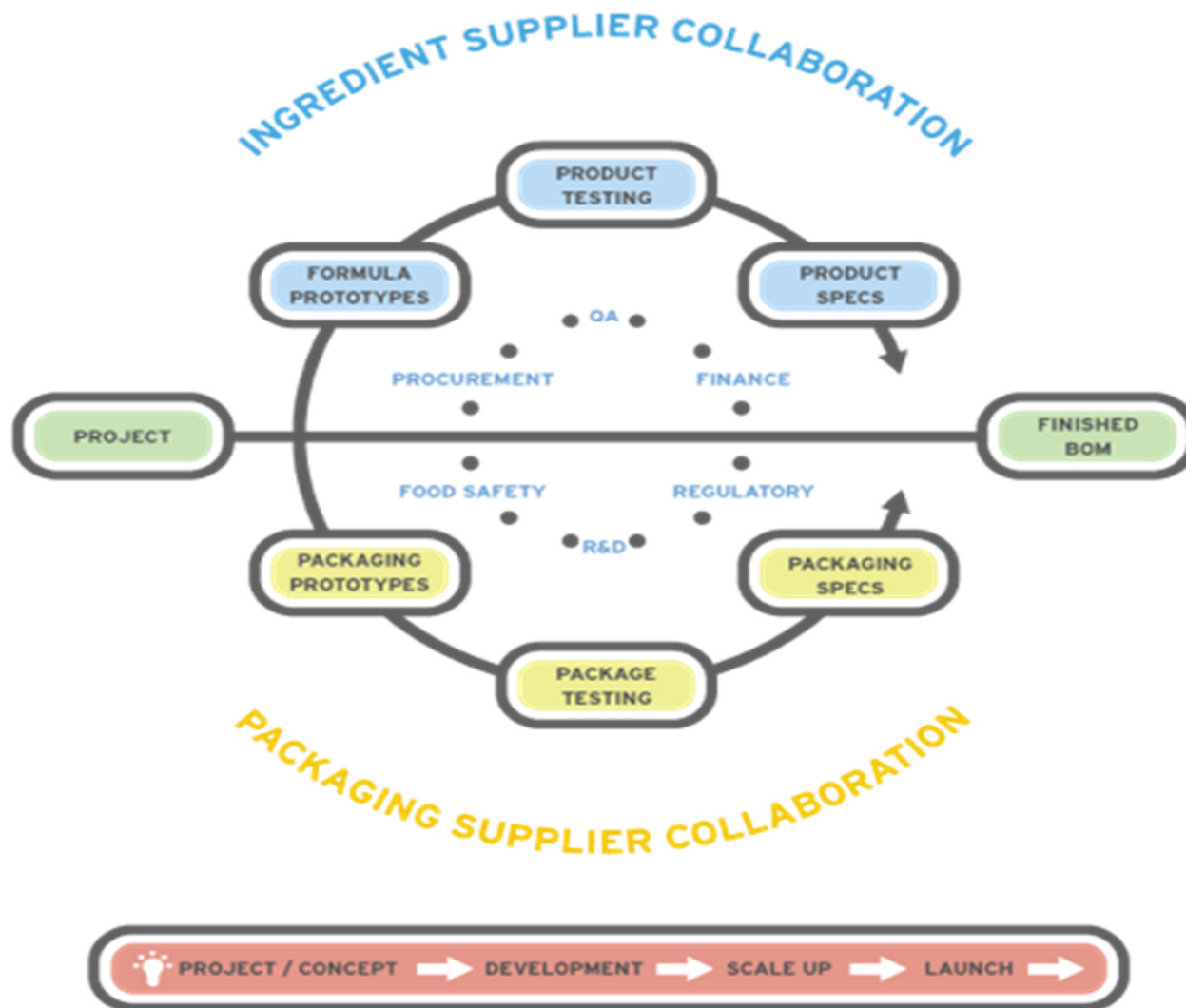
PLM Product Solution



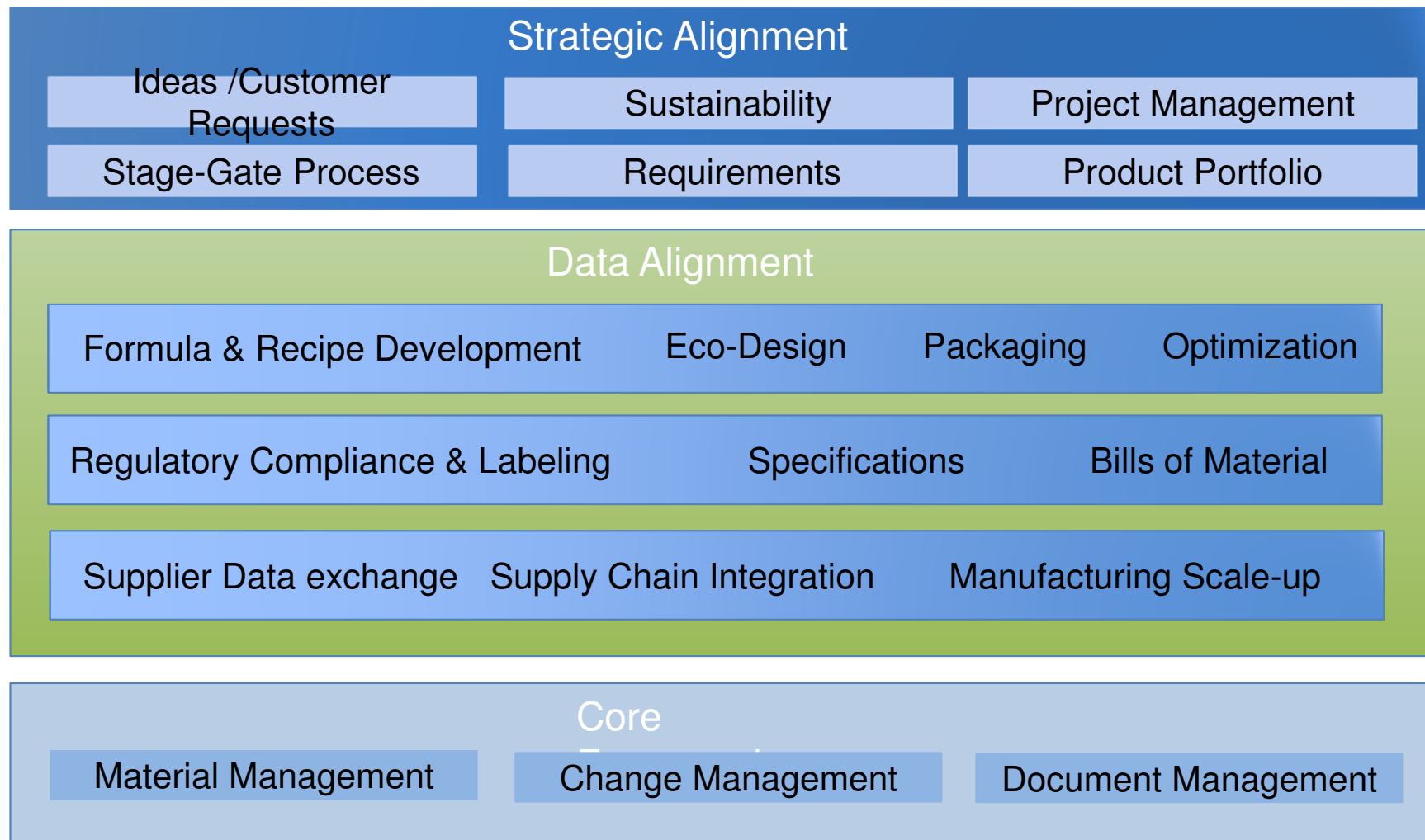


PLM Solution Maturity





DevEX PLM Architecture

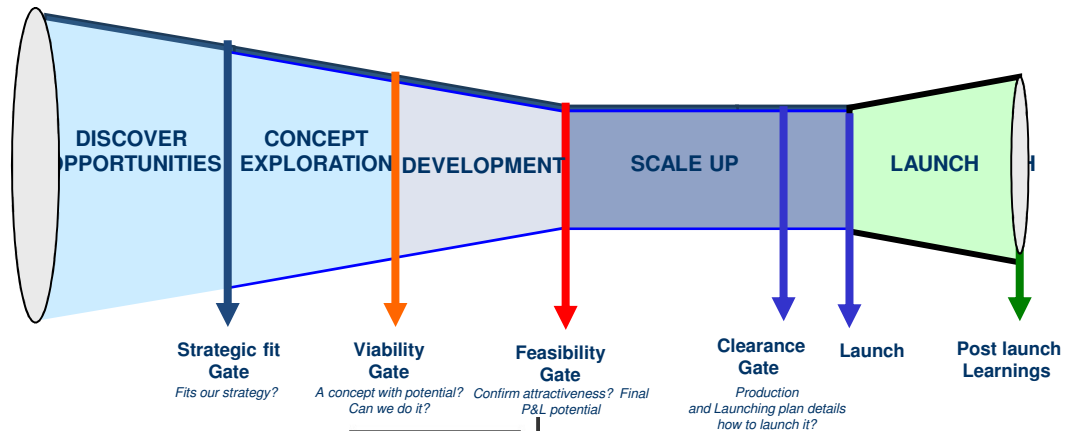
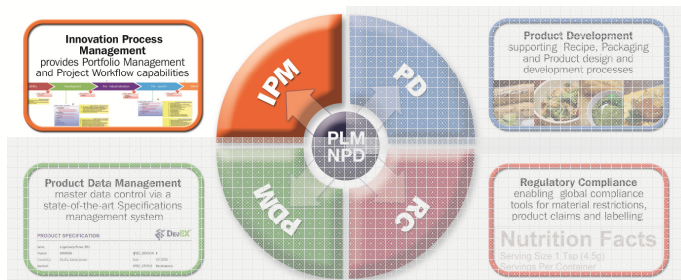


DevEX Modular Platform

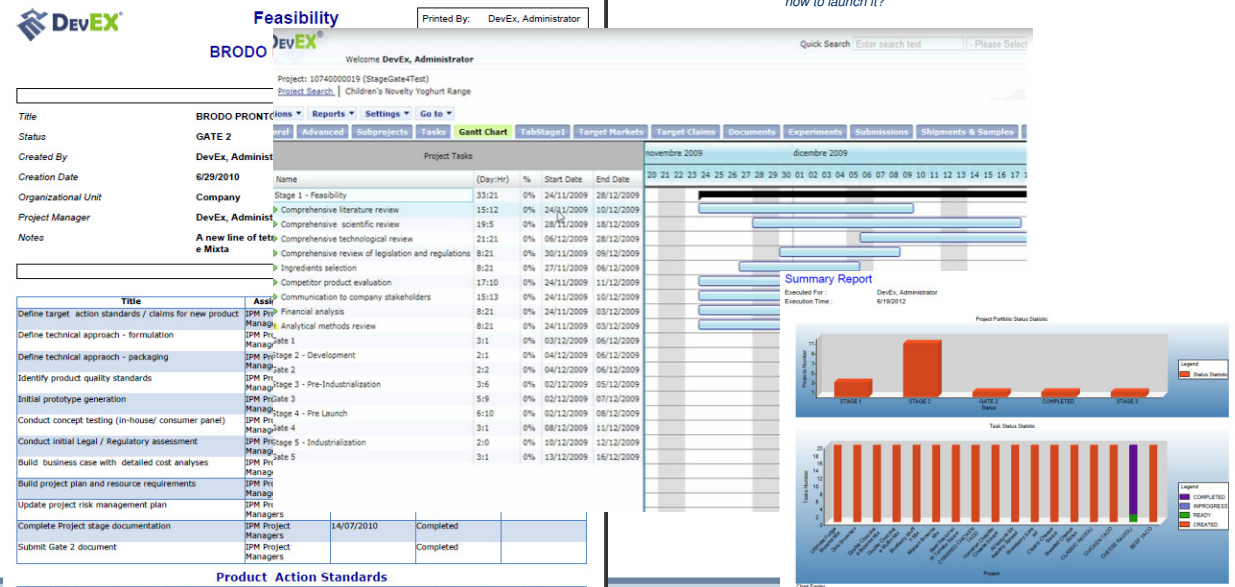
DevEX groups functionalities in 4 main areas



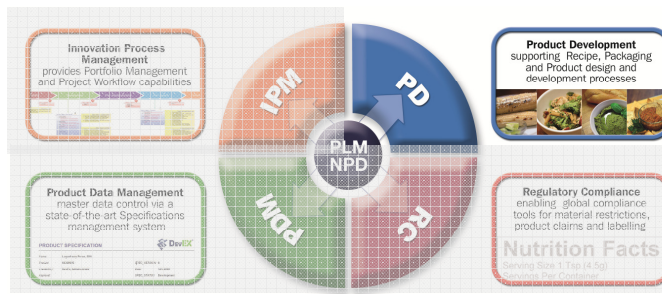
IPM – Innovation Process Management



- Stage-Gate Process modeling
- Project Management and collaboration
- Product Requirements
- Project Analytics and reporting features
- Emails and notifications
- Project documentation repository



PD – Product Development



- Formula Design and simulations
- Optimization
- Online restrictions checks
- Ingredient introduction / Supplier Collaboration and testing
- Formula validation and approval

Formula: ADM000020001

Views: RECIPE MFV Recipe editing mode: No Target

| Code | Description | QS | Materials Quantity En |
|-----------|-----------------------|----|-----------------------|
| 1 80000 | agua | | 12000 |
| 2 100632 | PUERRO BLANCO | | 0 |
| 3 100649 | APIO | | 0 |
| 4 100761 | ZANAHORIA | | 0 |
| 5 100841 | CARNE AVE | | 5 |
| 6 100933 | SAIN | | 2 |
| 7 101054 | GRASA FRITURA GALLINA | | 24 |
| 8 101057 | GRASA CERDO | | 13 |
| 9 101252 | CURCUMA | | 0 |
| 10 101736 | PATATA PURE | | 0 |
| 11 101784 | EXTRACTO CARNE | | 5.979 KG |
| 12 102423 | SAL SECA (SACOS) | | 107.210 KG |
| 13 102612 | CEBOLLA EXTRA | | 0.110 KG |

Flavour and Fragrance GMO Calculation
GMO process: Passed
GMO source: True

Claims Calculation
Nutritional Claims Overall Result: Valid

Global Food Additives Calculation
Global Food Additives Result: Errors Occurred

Total Quantity
Nbr of components: 12206.5010 kg
16

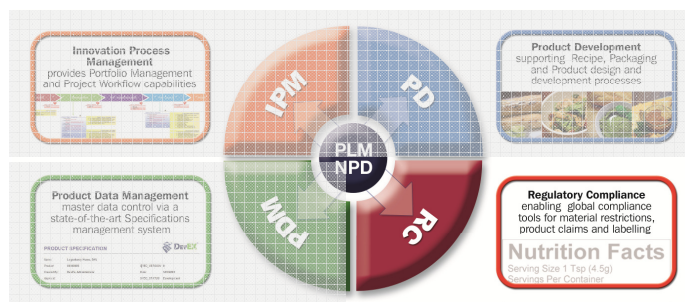
Recipe Navigator
Stage List Process Flow

Stage 1
Target Stage Moisture %: 0.000
Target Stage Quantity kg: 12,206.501...

BRODO POLLO PRONTO T1
Recipe Code: ADM000020001 - Modified On: 31/05/2010

Stage 2
Target Stage Moisture %: -1.000
Target Stage Quantity kg: -1.000...

REG – Regulatory Compliance



- Country guidelines, rules & restrictions
- Multi language labeling capabilities
- Assisted Ingredient list generation
- Product Labeling
- Customer/brands restrictions

Additional Formulas

| Additional Formula | Additional Formula headings |
|--------------------|-----------------------------|
|--------------------|-----------------------------|

Ingredient Statement - Formula Form

| Code | Ref.# | Name | Norm. % | Listed 1 |
|----------|-------|-----------------------|--------------|-----------------------------------|
| 500001_1 | A | Stage 1 | 100.00000000 | |
| 100632 | A1 | PUERRO BLANCO | 0.00090116 | PUERRO BLANCO |
| 100649 | A2 | APIO | 0.00090116 | **** MISSING DECLARABLE NAME **** |
| 100761 | A3 | ZANAHORIA | 0.00090116 | **** MISSING DECLARABLE NAME **** |
| 100841 | A4 | CARNE AVE | 0.04898210 | **** MISSING DECLARABLE NAME **** |
| 100933 | A5 | SAIN | 0.01975177 | **** MISSING DECLARABLE NAME **** |
| 101054 | A6 | GRASA FRITURA GALLINA | 0.19661654 | **** MISSING DECLARABLE NAME **** |
| 101057 | A7 | GRASA CERDO | 0.10650063 | **** MISSING DECLARABLE NAME **** |
| 101252 | A8 | CURCUMA | 0.00650665 | **** MISSING DECLARABLE NAME **** |
| 101736 | A9 | PATATA PURE | 0.00090116 | **** MISSING DECLARABLE NAME **** |
| 101784 | A10 | EXTRACTO CARNE | 0.04898210 | **** MISSING DECLARABLE NAME **** |
| 102423 | A11 | SAL SECA (SACOS) | 0.87830247 | **** MISSING DECLARABLE NAME **** |
| 102612 | A12 | CEBOLLA EXTRA | 0.00090116 | **** MISSING DECLARABLE NAME **** |
| 102640 | A13 | BB | | |
| 102641 | A14 | AR | | |
| 103500 | A15 | EX | | |
| 80000 | A16 | ag | | |

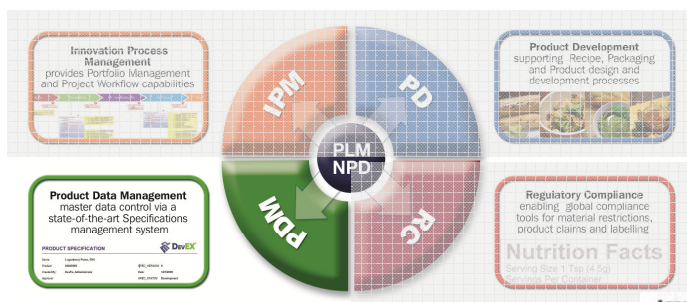
Nutritional Label Data

| Dec. | Declared Nutrient | Amount per Serving | Analyzed per serving | Op. | Declared per serving | Amount Per 100 | Analyzed per 100 | Op. | Declared per 100 | >U.M. | Dv% |
|------|---------------------|--------------------|----------------------|-----|----------------------|----------------|------------------|-----|------------------|-------|-----|
| Yes | Calories | | | | | | | | | | |
| Yes | Calories from Fat | | | | | | | | | | |
| Yes | Total Fat | 0.104 | | | 0.000 | 0.346 | | | 0.000 g | 0 | |
| Yes | Saturated Fat | 0.034 | | | 0.000 | 0.113 | | | 0.000 g | 0 | |
| No | Trans Fat | | | | | | | | | g | |
| Yes | Cholesterol | 1.518 | | | 0.000 | 5.061 | | | 5.000 mg | 0 | |
| Yes | Sodium | 105.458 | | | 110.000 | 351.527 | | | 350.000 mg | 5 | |
| No | Potassium | | | | | | | | | mg | |
| Yes | Total Carbohydrates | 0.001 | | | 0.000 | 0.005 | | | 0.000 g | 0 | |
| Yes | Dietary fiber | | | | | | | | | g | |
| Yes | Sugars | 0.001 | | | 0.000 | 0.005 | | | 0.000 g | 0 | |
| Yes | Protein | 0.071 | | | 0.100 | 0.238 | | | 0.200 g | 0 | |
| Yes | Vitamin A | | | | | | | | | mg | |
| Yes | Vitamin C | | | | | | | | | mg | |
| Yes | Calcium | | | | | | | | | mg | |
| Yes | Iron | | | | | | | | | mg | |

Serving Size (Label)

30 g

PDM – Product Data Management



- Full product Hierarchy (substance to pallet)
- Approval workflows
- Versioning
- Product Images and attachments
- Portfolio management and reporting

Specification 00000008 v. 0 of Type Consumer Unit (1) BRODO POLLO (Valid)

DEVEXion Search | 00000008(0)

Actions Reports Settings Approval Collaboration Go to

General Sections Target Markets Target Claims Referenced Specs

Approval: SPEC_STATUS Development

Modifications List

Revision: 8/1

Specification 00000008 v. 0 of Type Consumer Unit (1) BRODO POLLO (Valid)

Specification Search | 00000008(0)

Actions Reports Settings Approval Collaboration Go to

General Sections Target Markets Target Claims Referenced Specs

Sections Reports Approval

Modifications List

Product Data

Packaging Data

Phys-Chem and Microbiological

Composition (Bill of Materials)

Documents

| Parameter | Tolerance |
|-------------------|---------------|
| Materia seca..... | 1,4 % ± 0,2 |
| Nitrógeno..... | Ver proteína |
| Grasa..... | 0,2 % ± 0,05 |
| Cenizas..... | 0,78 % ± 0,02 |
| Sal..... | 0,77 % ± 0,01 |
| Nitrógeno amínico | > 0,01% |
| Proteínas..... | 0,27 % ± 0,04 |
| pH..... | 6,0 ± 0,1 |



Selerant
Regulatory research and Scientific Affairs (RSA) Department

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