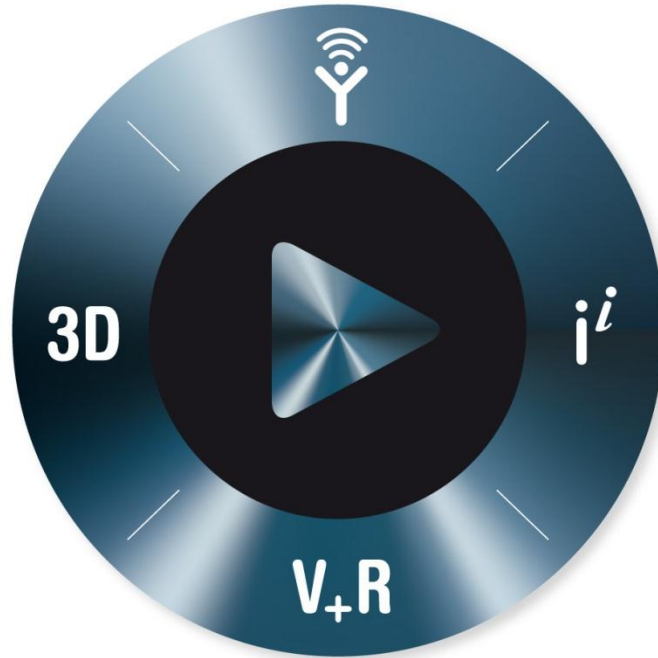


# Dassault Systèmes

From product and package ideation  
to 3D consumer validation in a  
single business platform



**3D**EXPERIENCE

FOOD SESSION  
Fabbrica Futuro  
Bologna, 19 Marzo 2014



# Packaging is a key driver to win at shelf

- ▶ In-store is the #1 driver of product awareness.
- ▶ 85% of purchase decisions are made in store.
- ▶ 70% of purchases are done in seconds.
- ▶ 100% of “closing the sale” is driven by packaging & artwork.

**Perfect Package + Perfect Shelf =  
Win with the Shopper**

# CPG Trends

## Packaging ≠ Container for Product



## Increased Regulation and Need for Compliance



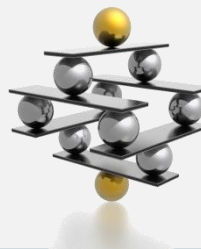
## Shorter Time to Market and shorter delivery Time



## Green Going Mainstream



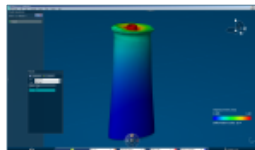
## Balancing Performance and Cost



# Perfect Package

Rethink package design

Technical  
Qualification



Production  
Specifications

Step 2 of 2: Specify Section Information

Section	Material	Thickness	Radius	Flange	Flange	Flange	Flange
1	Aluminum	1.5	0	0	0	0	0
2	Aluminum	1.5	0	0	0	0	0
3	Aluminum	1.5	0	0	0	0	0
4	Aluminum	1.5	0	0	0	0	0
5	Aluminum	1.5	0	0	0	0	0
6	Aluminum	1.5	0	0	0	0	0
7	Aluminum	1.5	0	0	0	0	0
8	Aluminum	1.5	0	0	0	0	0
9	Aluminum	1.5	0	0	0	0	0
10	Aluminum	1.5	0	0	0	0	0

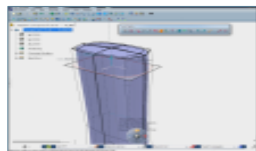
Consumer  
Validation



Artwork &  
Labeling



Technical  
Design



Concept  
Development



Consumer  
Insights



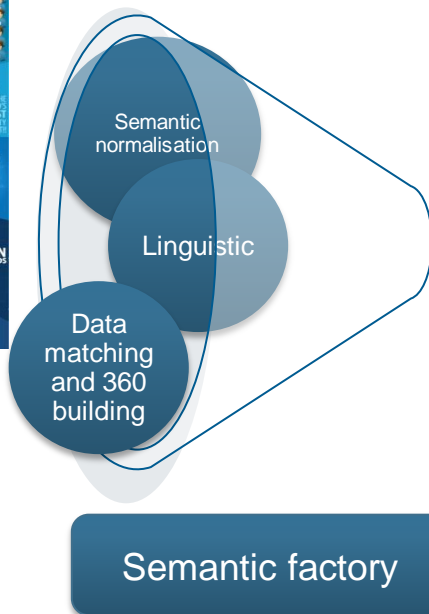
Initiative  
Management



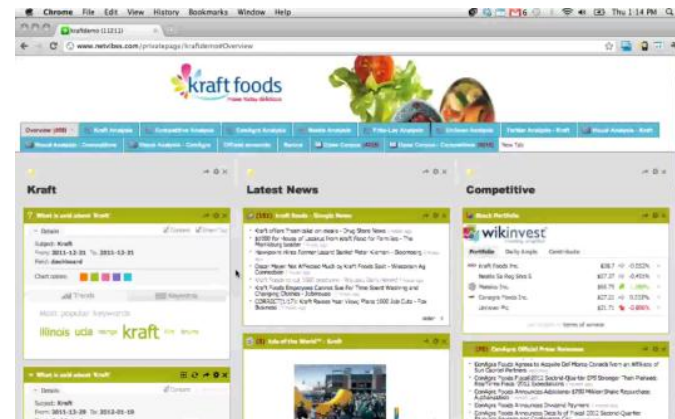


# Consumer Insights

*Understand consumers through sentiment analysis.*



## Dashboard Intelligence



# Consumer Insights

*Listen to consumers conversations to anticipate trends and issues*

## ► Trends Detection

- Analyze Social network Facebook, twitter, blogs...
- What is trending in your competitors social networks
- Positive/Negative, trends, New Product



## ► Market Validation

- Leverage users experience and suggestions
- Provides warning of potential market issues



# Initiative Management

Manage a concurrent package design efforts inside and outside the enterprise.

The screenshot displays the 'Rejuvia ReLaunch Community' interface. At the top, there's a header with the '3D SW' logo, user 'Dave MCLEAN', and a search bar. Below the header is a banner image with 'Rejuvia Community' and 'DayCo' text. The main content area shows a 'Status' section with a timeline of milestones: 'Discovery' (Jun 25, 2012 - Jun 25, 2012), 'Idea Qualification' (Jun 25, 2012 - Jul 28, 2012), 'Concept Qualification' (Jun 25, 2012 - Jul 21, 2012), and 'Development' (Jun 25, 2012 - Oct 27, 2012). Each milestone has a 'Go / No-Go' decision point. A 'Legend' section at the bottom left shows a table with columns for 'Legend', 'State', 'Name', 'Estimated Finish Date', and 'Actual Finish Date'. The 'Tasks' section on the right lists tasks like 'Conduct 12-week Post-Launch Audit', 'Conduct 26-week Post-Launch Audit', 'Conduct 52-week Post-Launch Audit', and 'Define Research Plan and Success Criteria' with their respective due dates. The bottom of the interface includes 'Design Brief' and 'Mood Board' sections.

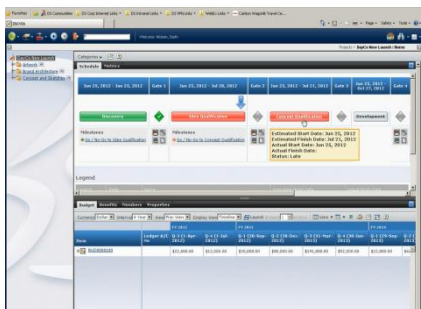
Legend	State	Name	Estimated Finish Date	Actual Finish Date
1	Complete	Gate Review - Stage 0	Jun 25, 2012	Jun 26, 2012
2	Create	Next Qualification Gate Review	Jul 28, 2012	

# Initiative Management

Requirements-led design using stage-gate processes and social tools.

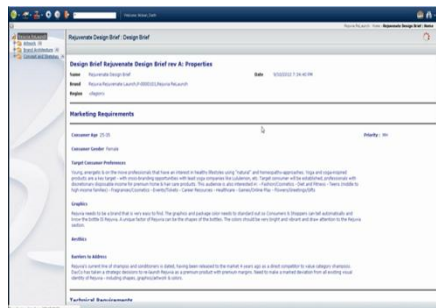
Plan

Creation of Project Plan



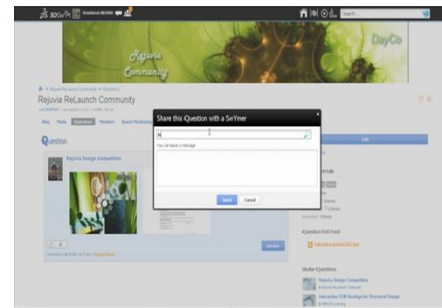
Align

Design Brief Creation



Launch

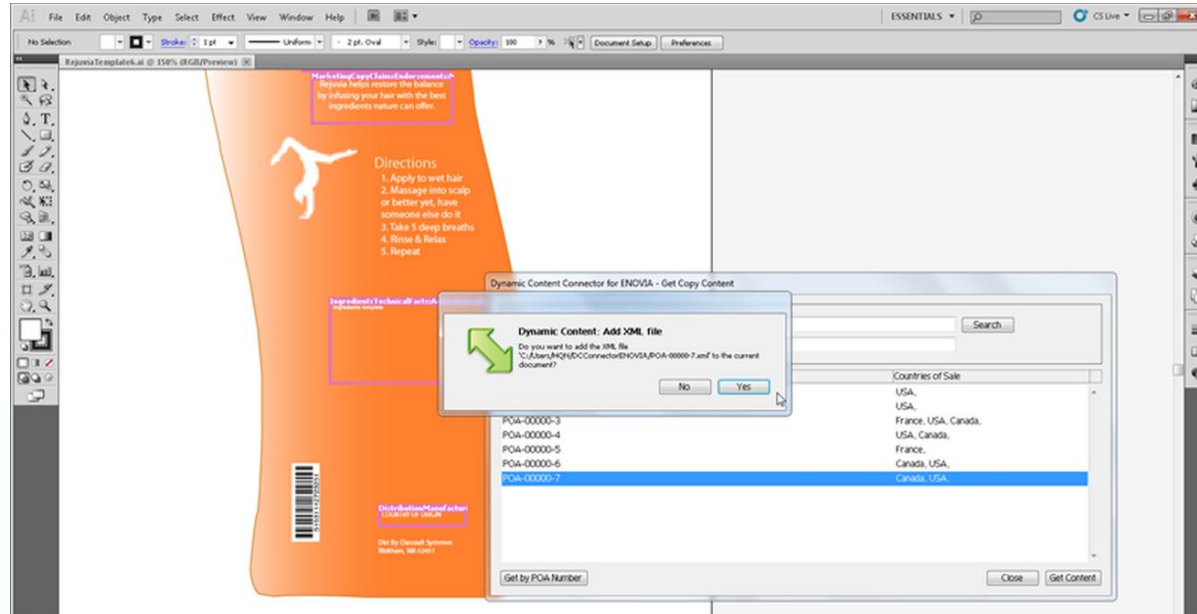
Collaborate through Social Tools





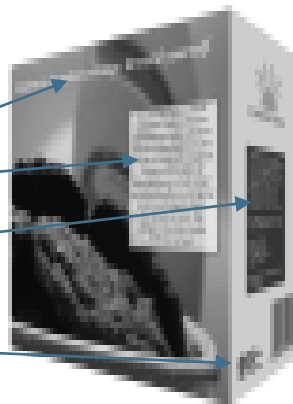
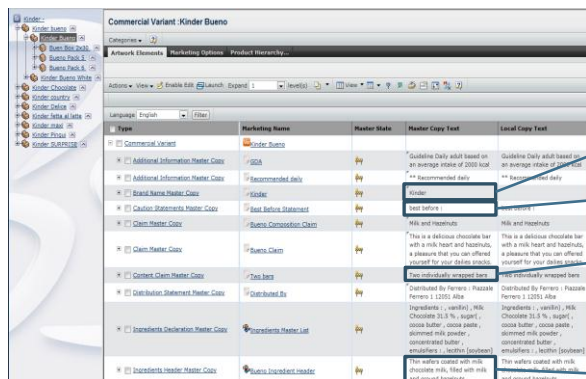
# Artwork & Labeling

Avoid recalls by centrally managing label development across the artwork “supply chain.”



# Artwork & Labeling

Manage copy and graphic templates to rapidly create new artwork.



Rapidly create new pieces of artwork while ensuring quality.



# Production Specifications

Manage specifications across its lifecycle from concept to production.

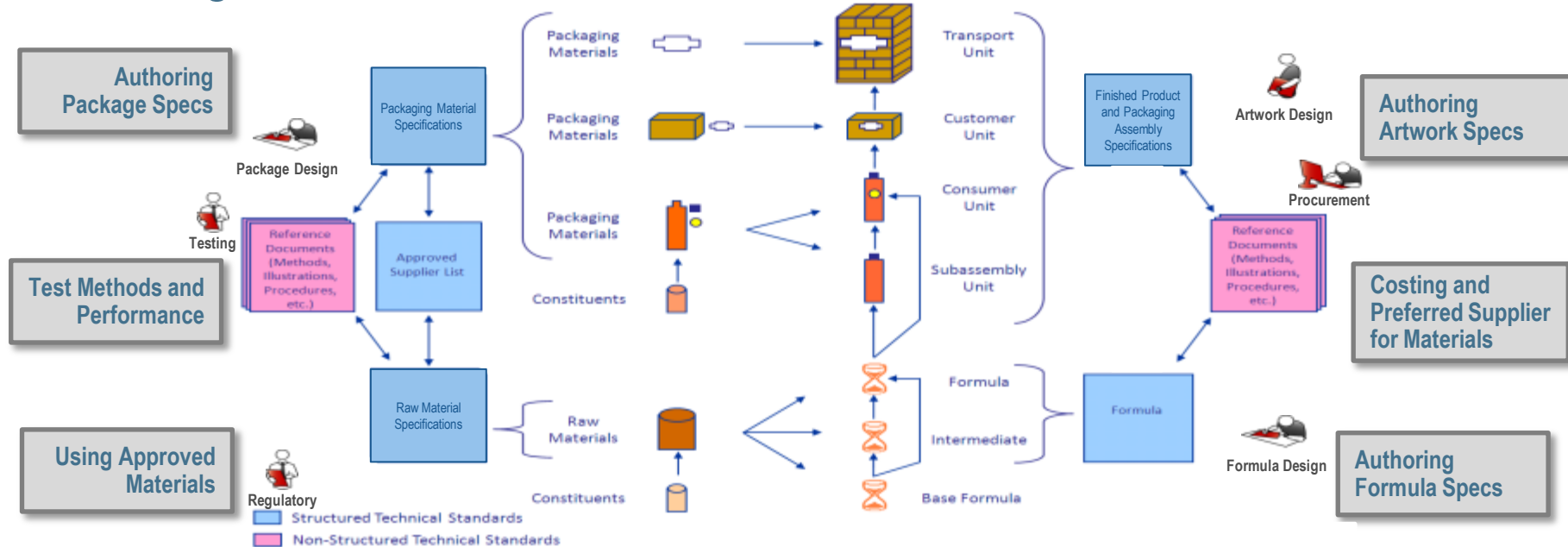
The screenshot displays the 'Product Data Summary View' for 'FPP-00000011 rev 1: Preliminary'. The interface is divided into several sections:

- Product Data Summary View:** Shows the product name, revision, and status. It includes a 'Where Used' section with a table of usage details.
- Bill of Materials:** A tree view showing the hierarchy of parts and sub-assemblies. The tree is expanded to show 'FPP-00000011' and its sub-components.
- Where Used:** A table showing the usage of the selected part. The table has columns for Levels, Sequence Number, Ref Des, Qty, Name, Part Mode, Related CR, Revision, Type, State, and Description.

Levels	Sequence Number	Ref Des	Qty	Name	Part Mode	Related CR	Revision	Type	State	Description
-1	010		2.0	FPP-00000004	Un-configured		1	Packaging Material	Preliminary	Sam Pack Sub Asse
-2	010		1.0	FPP-00000002	Un-configured		1	Packaging Material	Preliminary	Sam Pack BOM
-3	020		1.0	FPP-00000011	Un-configured		1	Finished Product	Preliminary	

# Production Specifications

Drive cost savings and compliance through integrated specification management



# Consumer Validation

Translate concepts into photorealistic renderings for review and research.





# Consumer Validation

Show new packages in context to review with consumers.



# Perfect Package...Design Winning Experiences

- **Identify winning concepts faster** by using 3D to assess more packaging options earlier in the process. (*package effectiveness*)
- Move **from serial to concurrent package design** across the entire design ecosystem. (*time to market*)
- **Prevent costly recalls** by creating tighter integration and control of artwork development and copy management. (*cost reduction and improved quality*)
- **Drive packaging reuse** instead of redesigning new packages for every product initiative (# of packages)
- **Lower cost of goods sold** through materials management, lightweighting and reuse.



# Procter & Gamble

Reinventing innovation from “molecule to shelf”



Packaging simplification is another big opportunity. P&G spends over \$5 billion annually on packaging materials and more than \$250 million on packaging development costs. The packaging development process touches every function in the Company, involves more than 3,000 employees, and has significant opportunities for simplification and cost savings. We are implementing virtualized end-to-end packaging development tools, which we believe can drive a 30% reduction in packaging costs and release 30% of the time spent today on package design.

**P&G 2011 Annual Report**

## ► Challenge:

- “We want to be a \$100B Company that acts like a \$10B one. We need to operate better inside & outside to become flatter, faster, simpler. Digitizing the company entirely from molecule to selling/shipping products is what will help us operate as a small company.”

## ► Solution:

- Partnered with Dassault Systemes to innovate from “Molecule to Shelf.” after exhaustive assessment done by Kalypso of P&G PLM capabilities and PLM providers.
- Created holistic, integrated platform for product and packaging innovation leveraging modeling & simulation.
- Rolled out V6 PLM to between 15,000 and 25,000 P&G employees and partners to create a single product and packaging data backbone connected to SAP.

## ► Benefits:

- Significant reduction in the time and cost to create new packaging and replicate initiatives globally.
- Large reduction in quality incidents and regulatory issues.

# P&G and DS: Establishing a Track Record of Success



Standardization

Simulation

Enterprise PLM

Business Transformation

The future of the industry will go to the innovators. P&G is clearly positioning itself to be at the forefront of those innovators.

**Mark Harrop**  
Founder and Managing Director  
PDP Group

**MatrixOne**

Materials  
Standardization

CSS

1998

**ABAQUS**

Materials  
Simulation

**VIRTOOLS**

Consumer Market  
Knowledge

Modeling & Simulation and  
Virtual Solutions

2004-2006

**ENOVIA V6**

Enterprise-wide  
PLM Backbone

2008

**ENOVIA V6**

CPG Accelerator for  
Integrated Product  
Mgt

**SIMULIA V6**

Virtual Testing  
*Simulate Impact on Primary and  
Secondary Packaging and  
Production  
Line Dynamics*

PLM Backbone

2009

Process  
Optimiz.

Virtual  
Testing

Virtual and  
Digital  
Design

Packaging and  
Label Mgt

Packaging  
Reinvention

2010

Model-Based  
Formulation

**engineuity**  
The Innovation Engine for Process Industries

**exalead** 

Product  
Reinvention

2011

# In Summary: Rethink Package Design

- ▶ Cut design time in half through using a concurrent design process.
- ▶ Connect internal organizations and external partners via a single platform.
- ▶ Avoid costly recalls through integrated artwork process.
- ▶ Qualify packages using virtual models.
- ▶ Validate new design concepts with consumers earlier in the design process.





