CONSTELLATION PROGRAM: WHIRLPOOL'S VISION FOR A WORLD CLASS PRODUCT DEVELOPMENT SYSTEM

Jeffrey L Burk
PMO Director
Global Product Organization

Key Whirlpool Experiences
• GPO IS Strategy and Planning
• Director Marketing - Small Appliance Business
• Director NAR Laundry Technology Center
• Global Planning & Strategy for Fabric Care
• Consumer Product Innovation - Refrigeration
• JV Operations start-up in Mexico
• 10 yrs global design, development, system eng.

Fred Bellio
CIO
Global Product Organization
Global Information Systems

Key Industry Experiences
• PLM Practice Director – Mercury PLM Services
• Business Transformation Director at Mercury Marine
• PLM Strategy and Deployment at Bombardier Aerospace
• Offshore Technology Center Setup
• Product Development Process Development
• Lean Six Sigma Green Belt
• 14 yrs structure & system design [aerospace industry]
LEADING PORTFOLIO OF BRANDS

World’s #1 major appliance company
$19 billion in revenue
~70,000 employees
Products sold in more than 170 countries
Leading portfolio of brands

WHIRLPOOL CORPORATION: 100 YEARS IN THE MAKING


Manufacturing Technology, Single Product, Single Customer
Multi-Product and Whirlpool Brand
Multi-Brand, U.S. Trade Expansion
Globalization
Top Consumer Brands, Maytag Acquisition
Winning Global, Sustainable Appliance Company

Sales
A CENTURY OF SUCCESS ... A FOUNDATION FOR GROWTH

**Foundational Strengths**

- Strongest Brand Portfolio
- #1 Major Appliance Company
- Best Distribution
- Leading Scale

**Growth Opportunities**

- Geographic Expansion
- Product Innovation & Product Line Offerings
- New Products and Businesses

Long-term Value Creation: leveraging our foundation while investing in ‘product’ to drive growth

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A DYNAMIC LANDSCAPE . . . NEW CHALLENGES, NEW OPPORTUNITIES

- Blurring of electronics industry with home appliance industry
- New global competition now includes traditional electronics players
- Emergence of Asia as a viable and significant consumer market
- Economic turbulence leads to consumer pessimism in mature markets

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IMPLICATIONS FOR WHIRLPOOL

Respond more rapidly to market demand

Meaningful innovation

Broader line of product offerings

Cost and quality: essential yet not sufficient

Scale as an advantage

Whirlpool must respond by transforming our business and specifically our product development processes and competencies

CONSTELLATION IS A PROGRAM CHARTERED TO DELIVER A WORLD CLASS PRODUCT DEVELOPMENT SYSTEM

- Leverage global footprint and scale.
- Enable end-to-end lean product development
- Enhance collaboration across functions, geographies, & supply chain
- Provide a real time single source of product information

Speed, cost, quality

Constellation supports Whirlpool’s efforts to transform our enterprise product development and product delivery processes
APPROACH TO PLM

Philosophical Framework
Link to key business strategies, transformations, processes
Drive the enterprise perspective to ensure company benefits
Aspire to ‘off the shelf’ and ‘out of the box’
Primary consideration placed on strategic partners’ solutions
Executive Sponsorship – needed to ensure alignment and proper decision making

Execution Approach
Focus on the core or basics first
Manage project portfolio with a PMO
Partner with PTC
Majority of resources internal
Deploy in phased approach

BENEFITS EXPECTED

➤ Shorter product development cycles
➤ More consumer relevant innovation
➤ More product variants from fewer platforms
➤ Best cost and best quality position
➤ Leverage Whirlpool’s size, resources, geography
PTC AND WHIRLPOOL

History
- Whirlpool one of PTC’s first ProE customers in 1986
- ProE becomes Whirlpool’s [exclusive] CAD tool of choice 1990
- Begin transition to Windchill for [CAD] PDM in 2007
- Whirlpool/PTC strategic PLM partnership formed in 2010

Products Currently Used or Being Deployed
- ProE/CREO
- Windchill ProjectLink
- Windchill PDMLink
- WQS
- MathCAD
- Mentor Graphics
- MKS
- Isodraw
- Product View
- Arbortext
- PPMLink (Pilot)

Planned or being explored
- WPA
- SuMa
- MPMLink

LOOKING FORWARD

Phased Approach
- Begin with core capabilities; product design, configuration, and change control
- Expand through value chain; supply chain, manufacturing, service, etc.
- Build on core capabilities to support quality management, cost management, project & portfolio mgmt, environmental & regulatory requirements, etc.

Continue to leverage PTC partnership
- Challenge PTC with new business needs and opportunities
- Leverage PTC knowledge and new product offerings
- Continue to drive improved integration with other enterprise applications

PLM is not a one time event, it is a journey
Thank You