

Food Production/ Processing

Product Development

North America; Worldwide

Project Sponsor: EVP, Product Development

Project description:

- Self-funding, non-technology process improvement effort for the worldwide product development organization. The effort targeted standardization and simplification to increase the benefits from a recently completed Product Lifecycle Management [PLM] technology deployment.
- Scope of project:
 - Product Development—innovation, inbound product requests, formula creation
 - Science and Technology—ingredients selection, product testing, sensory and product guidance
 - Packaging—package design, testing and production
 - Worldwide Quality—product performance and food safety
- Improvement benefits:
 - Annual cost ↓10%
 - Break even point6 mos.
 - ROI [12 month].2.5x
 - Development cycle time ↓30%
 - Pipeline product volume ↑10%

Product Development: Bench to Plant

Situation Analysis: When competitors began to make inroads with new products, ClientCo senior management decided to improve its own Product Lifecycle Management [PLM] capabilities by deploying a leading PLM software application. Three improvement goals were targeted: shorter development cycles, reduced development costs, and increased control of formulas/ingredients. Soon after the technology was launched, cycle times and costs increased. Decreases in formula-control capabilities created issues with production plants and external regulatory authorities.

Improvements Identified: The Lab was engaged to review the PD processes for one worldwide division, and over 200 improvements were identified during the Phase I analytical effort. While all improvements were PLM-related, only 20% were linked to the new technology and the IT deployment approach utilized. The remaining opportunities 80% were independent of any technology. Examples of both:

1. **Existing Process “Cleanup”**—The deployment team chose to drive PD process improvement through implementation of the new technology. However, existing manual PD processes were needlessly complex and ad hoc. Failure to simplify and standardize prior to deployment created costly variation and burdensome business rules as the new PLM application was inefficiently shaped by the existing process.
2. **Project Management**—Numerous tactical mis-steps failed to avoid common deployment pitfalls. Example: Insufficient investment in pilot testing prior to firm-wide rollout. Although parts of the organization overcame significant systems obstacles, no procedure existed to transfer these best practices.
3. **Application Development**—Although the IT group acknowledged the essential role of end-user input for successful configuration and deployment, “non-users” played a dominant role in the requirements development process [e.g., Safety, Regulatory, Control, Compliance]. Result: Unrealistic demands on day-to-day users—cumbersome controls, excessive reporting steps, inflexible linear sign-offs.
4. **Configuration Management**—The new application was selected on the basis of its existing “prefabbed” capabilities, business rules and functionality for NPD processes. However, existing processes were not sufficiently documented and aligned with the new technology prior to deployment.

Overall Results: The five-month implementation effort targeted an overall cycle-time reduction of 30% and a cost reduction of 10%.