

Recipe for Product Innovation

by Andrew Dolvig, January 16, 2012

Changing an iconic product can be perilous. Think New Coke. But sometimes change is necessary. From assessing the business case to implementation, here is a look at how a manufacturing giant used a fundamental project management approach to minimize risk when it sought to modify its most popular products.

Don't mess with success, so the saying goes. But a global food and beverage company dared do just that. By switching a key ingredient in its flagship products, the taste that consumers loved would remain the same – in theory – but the change would save the company tens of millions of dollars each year.

It was a risky move, entailing first-of-its-kind technology, enormous capital outlay and worldwide tech transfer – with no guarantee that consumers would approve.

A project management approach, while not assuring product success, enabled the company to make fact-based decisions every step of the way.

Phase 1: Assess the business case

Before sinking millions of dollars into the overhaul, was it really worth it? On the plus side, the payoff would be huge. Because the new ingredient was far less complex for suppliers to manufacture, it would cost half as much to buy as the original.

Moreover, it was widely available, so suppliers would be willing to haggle on price; the original ingredient was “custom.” Though the company had to acquire sophisticated new technology to use the ingredient in its products, after recouping its investment, the firm would glean \$30 million in annual cost savings.

To determine project viability, the project management team systematically identified and investigated the project's requirements, which included:

Technical

- Assess if using the new ingredient would necessitate developing a different manufacturing method for each of the 250+ products to contain it. If such customization were required, was the initiative feasible?
- Redevelop formulas for more than 250 different products, while ensuring parity in flavor and texture with the original versions. What would it cost, how long would it take, and what was the risk of failure?
- Evaluate whether the same amount of product could be produced per shift using the new versus the old ingredient. If efficiency were lost, was it a worthy trade-off given the cost savings the new ingredient would provide?

Operational

- Determine the interrelated workstreams required to achieve success. How might a delay in one impact the others and the project as a whole?
- Buy new equipment for 16 factories worldwide, then tweak the technology to each product's requirements. Taking four years per factory, how much would that cost in dollars and disruption?
- Identify the process to scale up from pilot plant to commercial manufacture. What would it cost, and what obstacles might be faced?

Market

- Would people buy or abandon the reformulated products? That was the make or break. What would consumer testing entail, what would it cost, and how well could the results be predicted?

By quantifying and then integrating all the information pro and con, the project management team was able to develop a robust risk/benefit profile. Though the project carried considerable risks, they were each defined in measurable terms and accompanied by contingency plans, whose own risks, in turn, were identified and defined. Senior management could make a decision based on hard facts, rather than on passion and hope. The project was a go.

Phase 2: Implementation

Assessing project viability had required considerable upfront planning. So when they were given the thumbs up, the team immediately started structuring the project's three major stages: front-end product development, pilot plant manufacture and scale-up, and consumer testing.

The challenge of consumer testing – Even if all other hurdles were cleared, should people reject the reformulated products, the entire effort would fail. The problem was that little science existed behind consumer testing.

Although analytic lab tests might show flavor equivalence between the new and original products, once real human beings got involved, all bets were off. “It’s not quite the same.” “This one has a funny aftertaste.” “Why are you changing it?” Predicting the single most important requirement for project success was almost impossible. Personal perceptions could skew the results and send scientists scurrying back to the drawing board.

In fact, that is what happened. During the first phase of consumer testing, two products failed. That’s where the true value of proactive risk planning kicked in. Well in advance, the project management team had set expectations around testing volatility, which had come to light while investigating the project’s business case. Money had been set aside to fund additional prototype development in just such a circumstance. Timelines had to be recalibrated, but no one had been blindsided. Though not a welcome setback, it didn’t upend the project, which continued apace.

Product “obsoleting” – At the far end of the project, the challenge was how to swap out the original products on store shelves worldwide. What process would maximize efficiency while minimizing the amount of old product that would end up in a landfill – and ensure uninterrupted inventory for global retailers?

First, the project team investigated labeling regulations for each of the 30 regions around the world in which the products were to be marketed. For the type of ingredient change the company was pursuing, some governmental authorities required new labeling immediately for the reformulated product before it hit store shelves. These markets were deemed “high risk.” Other regulatory bodies provided a grace period of up to one year (“medium risk”). Still others gave one to two years to make a labeling change (“low risk”).

- In high-risk markets, factories were to start decreasing inventory early, with the remainder to be discarded at the launch of the new product. The company didn't want stores to stock old and new product alongside one another on store shelves – with two different ingredient labels that could confuse consumers.
- In low-risk markets, factories would use the old label on new product until it was time to make additional label changes, such as adding graphics for a holiday promotional. That way, the company need change the label only once, not twice.
- Medium-risk markets would be managed like high-risk markets, but with breathing room for label crossover during inventory reduction.

Using this strategy, the changeover could be performed in a controlled, systematic way with prudent use of limited resources.

Proven strategy for preventing heartburn

Changing a well-loved consumer product requires kid gloves and an iron stomach. For this multinational company, the risks were high and so were the stakes. But a project management approach enabled the firm to pursue its business goals with greater security, while keeping a smile on the face of its customers and shareholders.

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