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Collaborative Product Development

It helps reduce risk, shorten development time, and lets you focus on your core strengths. Just ask Apple.

The product development process is undergoing a tremendous realignment as the competitive pressures of the global marketplace heighten. One response to this pressure has been the emergence of collaborative development between partner companies.

Collaborative development is a difficult process to establish, but one that pays tremendous dividends when done well. I'll outline three key benefits to a well-aligned product collaboration and discuss how this emerging trend has dramatically affected Apple Computer's development strategy.

Apple has introduced many innovative products over the years and has generated an incredible loyal customer base. Two products, the Macintosh and the iPod, went beyond exciting and revolutionized their respective industries. Although these products were introduced seventeen years apart, the emergence of collaborative product development dramatically changed the way Apple designed and manufactured the iPod versus the Mac.

The Mac was the first popular Apple product to incorporate the mouse and graphical user interface. (Actually, the Lisa was Apple's first product with a mouse and GUI, but was never successful in the market.) The mouse was so revolutionary, Apple had to spend a great deal of their marketing effort just explaining what it was. Introduced with great fanfare in 1984, the Mac quickly became Apple's leading product.

From a design chain perspective, the Mac was traditional. Apple developed it internally, reportedly spending approximately \$100 million over several years. What is more remarkable is that Apple manufactured the Mac themselves, spending another \$20 million to build a specialized factory in Fremont, Calif. This factory was one of the most automated electronics factories of its day producing a Mac every 27 seconds.

Fast-forward seventeen years and contrast the distinctly non-traditional manner in which the iPod was developed. Apple relied on a partner company for much of the architecture and major component selection for the iPod. This company, PortalPlayer, had already developed a base platform for several audio systems and was an expert in the delivery of digitized music formats. Leveraging PortalPlayer's architecture and proven components, Apple dramatically reduced their financial and technical risk and shortened the time to market. Apple's formula of speed and reduced risk are two of the most important benefits of a well-aligned product collaboration, and according to Apple, help them develop the iPod in an astonishingly six months.



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As we all know, the iPod is an incredible success, more than Apple could ever have dreamed. It was introduced in October of 2001 and sold 125,000 units in the first quarter. Sales have increased every quarter since and now are over 2 million units per quarter. Apple also outsourced the manufacturing of the iPod, making the sales ramp comparatively easy to accommodate.

It is important to recognize that in choosing to work with partner companies, Apple in no way abdicated design control for the iPod. In fact, by all accounts they were intimately involved in system integration issues, trade-offs, and the detailed design. This is characteristic of a high performing product development collaboration. Ideally there is a blending of efforts, not a distinct line where it is obvious one company left off and the other began.

The collaborative development model allowed Apple to focus on their core strengths—making complex products easy to use and offering cutting-edge industrial design. Focusing on these strengths differentiated Apple's products from their competitors and allowed them to provide an outstanding user experience. In comparison to competing products on the market (and there were half a dozen from respectable companies) the iPod delivered a home run. This is the third key benefit of a well-structured product collaboration and should allow each company to focus on their core strengths.

Apple's approach with the iPod allowed them to enter this new market quickly and with a much lower risk. Given the rapid changes that were likely to take place in the marketplace, risk was an important consideration. It is also important to recognize that Apple never intended to be the low cost leader. Instead they relied on innovation, reaching the market quickly, and differentiating their product with a superior customer experience. Getting the right product to market at the right time drove the value of the iPod. This is one reason consumers are willing to pay more for an iPod than an entire computer with an equivalent hard drive.

In the three years since the iPod was introduced, several major consumer electronics companies, such as Sony, are now introducing their own "iPod killers." Clearly the iPod's heyday is limited, but it has generated an impressive fortune in the meantime. It also serves as an excellent example of how a well-aligned collaborative development can reduce risk, shorten development time, and allow focusing on core strengths.

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