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# Myriad Applications

## Lessons from Apple and the iPhone

AMR's recently released report "Research Supply Chain Top 25 for 2009" has ranked Apple as having the number 1 supply chain, with an "unbeatable combination of killer financials and stellar opinion scores." Why is Apple so successful, particularly with demand management? Looking at Apple's product lines, one can see the genius behind its innovative designs—including the iMac, iPod, and iPhone—that continue to meet or exceed customer needs through digital integration and ease of use, while reinforcing Apple's brand.

To be effective at managing customer demand, businesspeople must clearly understand what customers want and then design products to provide it. Take the iPhone, for example. In this era of increasing product proliferation through mass customization, why is the iPhone—a product that is offered to customers in essentially only 3 models (8 gigabytes, 16 gigabytes, and 32 gigabytes)—so successful? Perhaps the real lesson is that, if a product is well designed, then limited product offerings are viable, as long as customers are able to shape them for personal use. Such after-sale configurations can be achieved using alterations that may be

evidence that highlights why it is so successful. The flexibility and overall capability are very impressive, especially when coupled with the vast array of applications available through the "App Store." Our iPhone applications offer a secure portal for all of our various passwords (eliminating the need to use our birth dates—the only codes we could remember), a full-screen clock with multiple time zones (for when we're traveling and plan to call home at 10 p.m., only to remember we are 4 hours behind), and games (such as brain teasers to feel that we're doing something productive and car racing when we're past caring). All this adds up to a product that deserves the recognition it is receiving.

The second lesson to be learned from Apple's success has to do with its highly effective supply chain management (SCM). When a global sourcing strategy is executed effectively, it offers tremendous operational leverage for a company's physical supply chain. Both times Apple launched the iPhone, the company experienced no significant shortages in product availability. An aggressive global sourcing strategy made it possible to secure essential components well in advance of the product launch dates, which enabled Apple to share product design specifications with reliable suppliers. It


also should be noted that the limited number of product configurations for the iPhone minimized back-end purchasing, logistics, and inventory management challenges.

Another key aspect of Apple's SCM is the effective use of enterprise resources planning systems for improved visibility and inven-

tory availability. In order to diminish supply issues resulting from unreliable demand forecasts, Apple communicated the level of demand to suppliers and vendors and then facilitated effective information flow. The end result eliminated stockouts.

The final lesson we can take away from Apple's success is that supply chain financial performance does matter. Apple was ranked number one in this category, thanks to its use of the cash-to-cash metric to measure financial flow efficiency. In fact, AMR data showed that Apple had a negative cash-to-cash cycle time of -45.2 days.

### Apple's lessons put to work

The next time you attend a SCM meeting, keep these lessons in mind, and remember that even the most innovative product is of little value if the supply chain behind it cannot support global sourcing, information flow, transportation, logistics, inventory management, and product returns. In addition, make sure you are reviewing financials to see what they reveal about underlying strategic choices. While some argue that Apple's negative cash-to-cash cycle may be unsustainable over the long term, this assessment underscores the choices its executives have made to meet customer needs in the most cost-effective manner possible. 

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## Supply chain financial performance does matter.

dimensional, mechanical, electronic, or software-based. In this case, it is the latter that enables Apple to meet customer requirements more effectively via a standard, cost-effective platform. Consequently, customers find the iPhone friendly and easily integrated with other Apple products.

As iPhone users, we "Building Blocks" authors have anecdotal