APPLICATION LIFECYCLE MANAGEMENT AND BUSINESS STRATEGY

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Is building custom software a necessary evil, a process that's divorced from the really important parts of a business? Or is the ability to do this well the underpinning of every successful organization? The truth is probably somewhere in between these two extremes. One thing is clear, however: In many organizations, how well a firm executes its business strategies is inextricably tied to how good it is at creating and running new applications.

Think about it: Nearly every organization pursues strategies to differentiate it from its competitors. In most firms, custom applications play an essential role in providing this differentiation. The uniqueness they make possible might well be the most important way that information technology provides business value.

Yet custom applications don't just magically spring into existence. They also don't happily chug along unchanged forever. Instead, both the creation and operation of custom applications are accomplished through the process of *application lifecycle management (ALM)*.

The link between ALM and business strategy isn't always clearly understood. From the right perspective, however, it's clear that for a modern organization to be good at strategy—and thus at providing long-term profitability—it must also be good at ALM.

FROM INNOVATION TO OBLIGATION

The essence of business strategy is being different. A firm might do different things from its competitors, for example, such as offering different products or addressing different markets. Alternatively, it might do the same things in different ways, such as providing a lower-cost service. In either case, what marks an action as strategic is its ability to differentiate an organization from its competitors, letting it provide unique value to customers.

Competitive advantage flows from successful differentiation. Yet keeping good ideas secret is hard, and so remaining different is challenging. Figure 1 shows what typically happens.

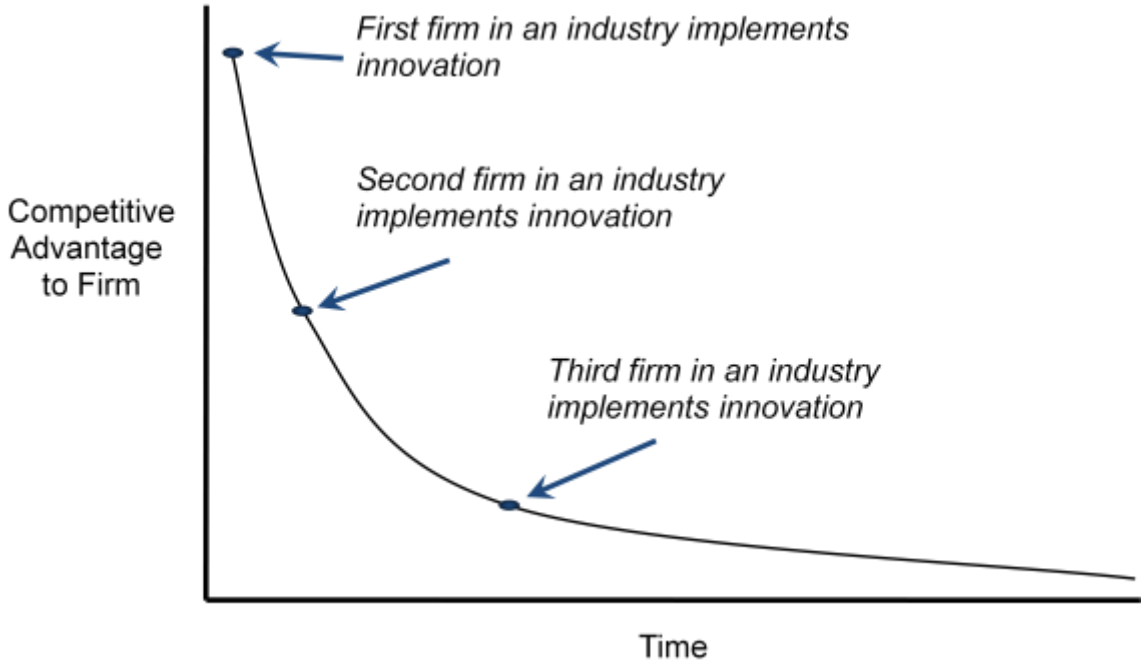

Figure 1: Successful innovations by a strategic leader eventually become obligations for other firms in the industry.

The first firm in an industry to implement a successful innovation gains a significant competitive advantage. The second firm to implement this strategy also derives some advantage from it. By the time the third firm in an industry follows suit, the new approach is usually well on its way to becoming a best practice. Anybody who doesn't implement it is likely to be at a competitive disadvantage. What begins as an innovation becomes an obligation.

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There's no shortage of examples that illustrate this. The first airline to add self-service check-in kiosks, for instance, gained a significant competitive advantage. The second airline to add self-service check-in kiosks also got some advantage. Yet today, kiosks are a cost of doing business for every airline—not having them would be a competitive disadvantage. Similarly, when FedEx let its customers track their packages directly via the Web, this innovation was rightly hailed as a powerful competitive edge. Today, we expect this from all shipping companies—the innovation is now obligatory.

FROM STRATEGY TO UTILITY

Pretty much every modern business strategy depends in some way on IT. Self-service check-in kiosks and Web-based package tracking are good examples of this reality. Yet note what happens: Over time, every successful strategy becomes part of the IT infrastructure. It's fair to say that virtually all of IT was once an innovation that conferred competitive advantage on its first adopters. Eventually, however, everything becomes a utilitarian IT function that must be supported effectively.

Given this, it's possible to divide IT spending into two broad categories:

- *Strategic IT*, spending on new capabilities that directly support new business strategies;
- *Utility IT*, all other IT spending. To a large degree, the technologies in this category represent the accretion of an organization's strategic innovations over many years.

Figure 2 illustrates how these two categories fit with the competitive advantage curve shown earlier.

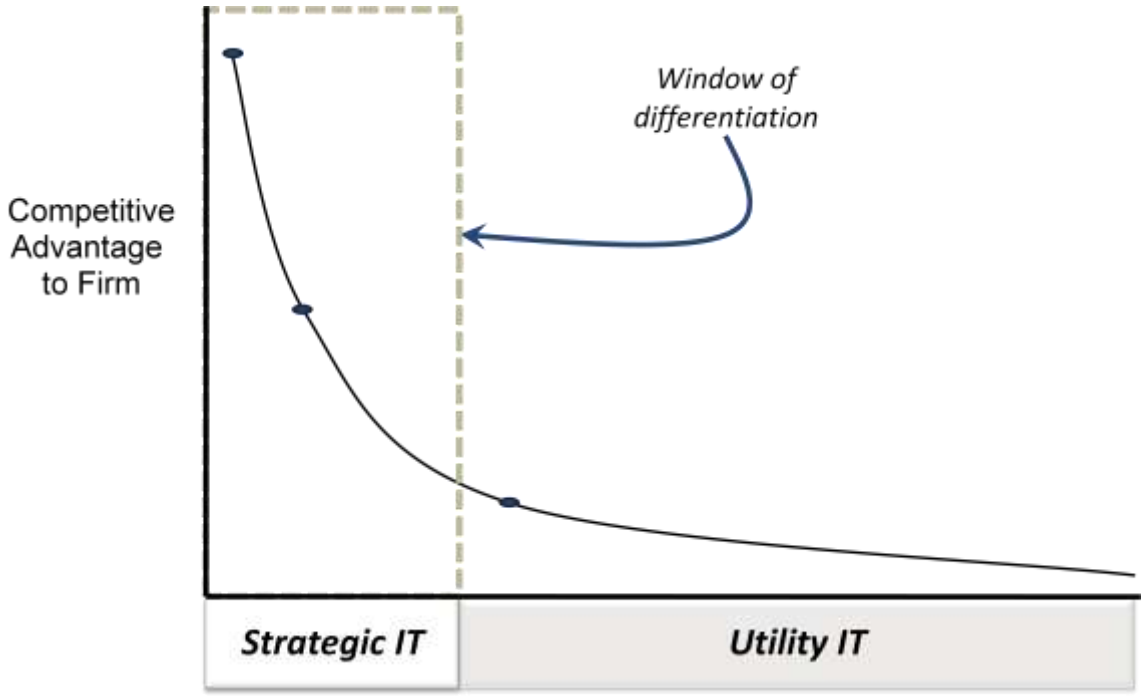

Figure 2: Strategic IT spending creates a window of differentiation.

As the figure shows, strategic IT supports the innovations that provide competitive advantage to an organization. But what does strategic IT really consist of? The answer in most cases is simple: custom applications. While packaged software is important to many businesses, getting strategic differentiation from a generic package is hard. Because of this, innovations such as airline check-in kiosks, Web-based package tracking, and many others depend on custom applications.

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Custom applications are rooted in ALM. This implies that how well an organization does ALM can have a powerful impact on its ability to create competitive advantage. As Figure 2 shows, there's a window of differentiation in which innovations can provide a competitive advantage, and so an organization must be able to create custom applications quickly. Yet successful innovations eventually move into the utility category, and so these applications must also be manageable over the long term. Doing this successfully is also part of ALM.

It's worth explicitly connecting all of these dots, and so to summarize, the connection between business strategy and ALM looks like this:

- Business strategy means *being different* from the competition.
- Being different relies on *strategic IT* investments to support that differentiation.
- Strategic IT investments are most often *custom applications.*
- Custom applications are created and managed through *application lifecycle management.*

CONCLUSION

The ability to support new business strategies is at the heart of business/IT alignment. IT decision makers commonly worry about operational risks such as "What if my data center goes down?" Many of them worry less about strategic risks like "What if we can't support the next new business strategy?" Yet not being able to support a business strategy can have a much bigger long-term impact than a one-time systems failure. Missing a chance to differentiate the business because an IT organization can't quickly support the CEO's big new idea won't help any IT manager's career.

Similarly, when a competitor rolls out a new strategy that lets it be first to exploit a window of differentiation, it's important to follow suit as fast as possible. Doing this commonly requires creating new applications, which depends on effective ALM.

Viewing ALM as a foundation for business strategy isn't a stretch; it's just a statement of fact. Because of this, getting good at ALM is an essential part of creating competitive advantage. In any organization where custom software matters—that is, in pretty much every organization today—mastering ALM should be a fundamental goal.

ABOUT THE AUTHOR

David Chappell is Principal of Chappell & Associates (www.davidchappell.com) in San Francisco, California. Through his speaking, writing, and consulting, he helps people around the world understand, use, and make better decisions about new technology.