Opportunities for Action in Consumer Markets

Innovation to Cash: Orchestrating in the Consumer Industry

THE BOSTON CONSULTING GROUP
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To generate the growth they need, consumer companies have spent decades pouring billions of dollars into innovation. Yet despite all the experience companies have accumulated in managing the innovation process, most new products and services fail to produce the expected returns, and many yield outright losses. Moreover, as product life cycles continue to shrink and copycat products proliferate, even highly successful new products may have very short lives in the marketplace. Under these circumstances, what steps can business leaders take to boost the odds of success?

Clearly, the answer is far from simple. Successfully developing new offerings involves large investments of time and money—and often, significant risk. We call the comprehensive process that extends from a new product’s conception to its phaseout from the market the innovation-to-cash cycle. (See the exhibit “The Innovation-to-Cash Process and the Cash Curve It Generates.”) Managing this cycle entails maximizing revenues, volume, and profits, while minimizing risks, time, and expenditures across the entire span of organizational structures and activities. The rise in the cash curve shown in the exhibit is the result. Success in managing your innovation-to-cash cycle requires applying this approach not to one project at a time but to a whole portfolio of projects at different stages of development. Increasingly, managing the innovation-to-cash cycle also requires coordinating these efforts not just across an executive’s own organization but across multiple organizations as well.
Few companies have mastered all the processes and skills necessary to manage this far-reaching undertaking with coherence, discipline, and creativity. In fact, large, established corporations have an especially difficult time, in part because they tend to be firmly wedded to their traditional—and historically successful—ways of going about each element of the innovation-to-cash process. In addition, such companies tend to have firmly established functional boundaries and practices as well as strong silos. Moreover, consumer companies in particular tend to bring a “do-it-all-ourselves” mindset to managing the innovation-to-cash process. In our experience, however, they would do well to explore alternative approaches.
Different Approaches for Different Situations

When it comes to commercializing an innovation, companies generally play one of three basic roles: the integrator, in which the company performs all the steps needed to take a new product or service to market; the orchestrator, in which the company retains direct management of some parts of the overall process and depends on partners to manage the rest; or the licensor, in which the company sells or licenses a new product or idea to another organization, which handles the rest of the commercialization process.\(^1\)

Each of the three approaches has a distinct economic profile with a characteristic pattern of investment levels and potential returns. Each one requires a distinct set of skills. And each approach has specific strengths and weaknesses that make it better or worse suited to different situations.

In the handset industry, for example, players can be found pursuing each of the three approaches, for different reasons:

- In late 2001, Ericsson, once one of the top handset makers, shifted its approach from that of an integrator to become an orchestrator and established a joint venture with Sony Corporation. Neither company had been able to compete with the scale advantages of market leader Nokia, nor were their handsets as profitable. But together they combined Ericsson’s expertise in mobile technology with

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1. For a more complete discussion of all three approaches, as well as many ways to boost the effectiveness of the innovation-to-cash cycle, see James P. Andrew and Harold L. Sirkin, "Innovating for Cash," *Harvard Business Review*, September 2003.
Sony’s capabilities in consumer electronics, design, and marketing; and they refocused on the top end of the market, where complexity and margins are highest. By 2003 Ericsson was participating only in those areas where it added the most value, and it leveraged Sony’s skills for other areas. Today Ericsson phones have been replaced with Sony Ericsson models, and the company recently reported a quarterly profit for the first time since the venture started—although global market share still hovers around 6 percent.

- In contrast, Samsung, the fastest-rising player in the market, has stayed the course as a classic integrator. Now poised to surpass Motorola as the number two manufacturer, Samsung is also moving to the top of brand awareness surveys. Rather than outsource its manufacturing, Samsung has invested billions in new factories. And rather than focus on just a few core competencies, it has remained diversified and vertically integrated, putting its own chips and displays into its digital products. The company believes that it needs to stay in manufacturing in order to prosper. In a 2003 BusinessWeek article, Samsung Vice Chairman and CEO Jong Yong Yun was quoted as saying: “Everyone can get the same technology now. . . but that doesn’t mean they can make an advanced product.” By maintaining core technologies and mastering manufacturing, he believes, you can control the future.

- Microsoft has now entered the handset competition—but with a licensor approach. It spent two years developing a version of its operating-system software for mobile phones, called Smartphone. Rather than make handsets or hire someone else to make handsets for it, Microsoft licensed the innovation to industry players who were looking to make inroads into Nokia—such as wireless net-
work operators interested in selling their own branded phones. Microsoft’s ultimate goal is to capture as much of industry value as it can, and it believes the licensor model is the best approach for doing so.

The decision regarding which approach to use for a new offering is a highly strategic one because the approach governs how cash flows—and risks—are allocated among participants. Yet most companies tend to rely exclusively on whichever approach is most familiar, often without even considering the others. For most consumer companies, for example, the integrator role has been the approach of choice. However, what has worked well in the past won’t necessarily work well in the future. Competitive pressures, the need to improve financial returns, and a growing realization that they lack some of the skills necessary to bring innovation to market quickly and effectively are causing many companies to rethink their traditional approaches. In particular, companies that usually operate as integrators should seriously evaluate some of the advantages—in terms of time, investment, and risk—offered by the orchestrator approach.

From Owning Innovation to Orchestrating It

Consider Whirlpool’s experience developing its Gladiator GarageWorks product line. For Whirlpool, the world’s largest manufacturer of major household appliances, the Gladiator system of modular storage and organization products represents a radical departure from “business as usual.” First, the line is designed for a new “room”—the garage, rather than the kitchen or the laundry room. Second, it targets a new demographic segment—men, rather than women. Finally, it reached the market in record time—just
over one year after initial funding, rather than the three to five years typically required by new projects in the industry.

When the idea for Gladiator was first proposed, many people within Whirlpool assumed that the company would use the integrator approach to developing the product line, as it usually did. Yet in the end, the orchestrator approach proved to be a key to Gladiator’s success. Because the market for Gladiator was completely new to Whirlpool, and because Whirlpool was relatively unfamiliar with potential Gladiator customers, orchestrating allowed the company to accelerate development, invest less of its own resources, and spread the risks.

Specifically, to avoid the time and expense of hiring new engineers, Whirlpool tapped into the design expertise of its suppliers, including several that it had not worked with before. In addition, although Gladiator’s project leaders used Whirlpool manufacturing assets when in-house manufacturing made sense, they were rigorous about using outside assets when it did not. For instance, whereas the handles for some of Gladiator’s storage systems were taken from Whirlpool’s dryers, other items were made entirely by third parties that specialized in those products. Ultimately, Gladiator’s project leaders assigned the manufacturing of almost all the elements except the actual appliances to partners—an unprecedented move for Whirlpool.

Gladiator was launched in late 2002, after just 15 months of development. The response from consumers quickly exceeded expectations. Because Whirlpool had taken the orchestrator approach, turning extensively to outside parties, gross margins were lower than if the company had made everything itself. But although costs per unit were higher with this ap-
proach, total costs were lower, because there were no factories to build, for example. Moreover, a faster launch enabled Whirlpool to establish the Gladiator brand and gain a foothold in the market before copycat offerings arrived. As a result, Gladiator is expected to have higher total lifetime sales and to be more profitable than would have been the case if the company had taken the traditional integrator approach.

Equally important, the project gave Whirlpool invaluable experience in developing products much faster—and much less expensively—than it usually does. Such skills will be essential as the company continues its search for organic growth. Indeed, without new product lines or extensions, the appliance manufacturer would find itself essentially stuck in an industry facing slow growth, tightening margins, and increasingly elusive profits. It is a situation now confronting many large companies—including, for instance, automobile manufacturers.

Long a bastion of vertically integrated activities (going all the way back to Henry Ford’s famous River Rouge Complex), the automotive industry has traditionally embodied the do-it-yourself approach. For decades, major manufacturers’ size, scale, and deep pockets allowed them to own and conduct all the activities required not only to generate true innovations but also to bring them to market. In recent years, however, companies have found the approach increasingly difficult to execute. Innovations in automobiles now come from a wide range of sources, including suppliers, design houses, and even companies in other industries (for example, software firms). At the same time, intense economic and competitive pressures have led companies to rethink their need—and ability—to own all of the assets and employ all of the workers necessary to perform every activity themselves. Finally, the rise of increasingly large and so-
phisticated suppliers has opened up fundamentally new ways to involve other companies in the design, development, and production of vehicles.

To be sure, orchestrating is not completely new to the auto industry. But it is having a growing impact. For one, companies that were never willing to use the approach before are beginning to consider it. Perhaps more important, orchestrating increasingly is moving beyond small projects. Production run lengths of more than 75,000 to 100,000 units per year are now being pursued, which is beginning to take the approach out of small niches and into the mainstream. Needless to say, the major auto companies and their unions are watching the success of these new moves very carefully, as they have the potential to change the dynamics of large segments of the industry completely. Orchestrating is already giving rise to new types of companies. Magna International, for instance, is a company that started life as a component supplier but now has the ability, essentially, to build complete automobiles for almost anyone who wants to sell them.

**When to Orchestrate?**

In our experience, most managers base their commercialization decisions on fragmented and partial evaluations of the relevant factors. Worse, they make assumptions such as “We are as low-cost as any supplier can be” or “We’ll be the leader even if we’re late to market,” and then they fail to explore the consequences. To be sure, there is no “black box” that helps managers understand when the orchestrator role—or, indeed, any of the three approaches—will be most effective. But a systematic analysis of three critical dimensions—the nature of the innovation, certain characteristics of the industry, and the kinds
of risk involved—can be extremely helpful. Only through a rigorous analysis of these parameters can a company capture what is unique and important about the innovation and choose the approach that will maximize profits.

In general terms, the orchestrator approach is the right choice when a company has developed a breakthrough concept that is a step removed from its core business, when several capable suppliers and potential partners are available, and when time to market is of more than usual concern. Gladiator GarageWorks fits this profile. In addition, manufacturers of products with very short lives can do well as orchestrators, exploiting the capabilities of many partners simultaneously rather than following a linear process over which they might have more control. Other factors to consider, among many, are the level of physical assets required, the importance of brands, the infrastructure needed, the risk of substitutes, and the necessary financial investments.

What Orchestrators Need

Of course, for the orchestrator approach to work effectively, it must be a good match not only for the project but also for the company’s capabilities. To succeed as an orchestrator, a company will need capabilities that it may not have if it has traditionally pursued the integrator approach.

For one, the company should excel at managing projects across several organizations. It should also have strong skills in supply chain management, including the ability to find, evaluate, and work closely with suppliers—possibly all over the world—not just as undifferentiated vendors but as true partners. In addition, orchestrators need to be highly skilled in thinking
strategically about the value chain. Where and how—
exactly—do they want to play? How should they struc-
ture commercial arrangements to ensure that they
capture value (for example, determining which intel-
lectual property it is critical to own, and which it is
not)? Which activities that they have traditionally con-
ducted in-house are no longer essential to generating
cash? Companies often lack the key skills in these
areas and therefore must develop or obtain them.

Another organizational requirement for orchestrators
is strong and committed leadership at the highest
level. Because the orchestrator model often repre-
sents a departure from a company’s traditional ap-
proach to commercialization, it can run afoul of con-
flicting internal agendas, causing resentment and
resistance. Even when internal issues can be resolved,
close collaboration with other companies can raise
tricky legal and logistical challenges. And turning an
idea into cash cuts across so many functions and sub-
processes—both internally and at partners and suppli-
ers—that often there is no single owner of the overall
process. In Whirlpool’s case, explicit backing from
the CEO enabled the Gladiator team to withstand
institutional pressures to “do it our way.”

Another key factor is having the right metrics. While
this is true for any of the three innovation-to-cash
management models, it is particularly challenging for
the orchestrator model, in which metrics must be
applied both to internal contributors and to external
companies. Not many companies actually conceptual-
ize and manage the overall process of turning an idea
into cash; even fewer measure that process with any
real rigor. Many companies can’t even track the num-
ber of company-paid engineers working on a given
effort, let alone how well they are “extending the
enterprise” and leveraging suppliers’ engineers. Yet
metrics such as total time from idea to net positive
cash flow; tradeoffs among cost, quality, and time; and basic performance by innovation teams are essential to the management of the process. Failure to measure almost always reflects failure to manage.

Finally, successful application of the orchestrator model requires discipline. In many companies, existing process requirements (such as tollgates, milestones, and support requirements) are routinely ignored—without consequences. Too often, senior management commits funding, approves products, and allows marketing campaigns to be launched even though the team in question has not met its carefully established targets. Indeed, in most organizations, ineffective innovation projects are almost impossible to kill. Whether this lack of discipline arises from politics, egos, or other sources, the end result is costly: process discipline gives way to management by fiat, resources get fragmented, and promising innovations see their economic potential hemorrhage away.

Companies that adopt the orchestrator model must be particularly meticulous about imposing discipline—on themselves and on their partners.

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Rapid innovation is a key capability for competing with private-label and hard discounters, as well as with traditional competitors. As fast first-movers, consumer companies of all types win a greater share of their categories, dislodge competitors from current share positions, and increase overall consumer spending in the category. Organizations that have traditionally kept their product-development and commercialization processes in-house would do well to explore the considerable benefits of strategically adopting the orchestrator model. By working as orchestrators, they can bring out new products faster and for less money while sharing some of the risk with their collaborators.
They can leverage expertise that lies outside their organizational boundaries in order to pursue trading-up opportunities in new channels. And they can demonstrate to the industry a new level of ability to turn innovations into cash—for the benefit of all parties.

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Other publications on the innovation-to-cash process include the following:

“Innovating for Cash: Lessons from the Handset Wars,”
BCG Opportunities for Action in Technology and Communications, January 2004

“Innovating for Cash,”
BCG Perspectives, December 2003

_Raising the Return on Innovation_,
A BCG Senior Management Survey, December 2003

“Innovating for Cash,”

“Innovation to Cash: Orchestrating the Process,”
BCG Opportunities for Action in Industrial Goods, September 2003

“Boosting Innovation Productivity,”
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