Perspectives

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Making Innovation Pay

After years of focusing intensely on cost, quality, and productivity, companies seem to have rediscovered growth. In every industry, senior executives are turning to their organizations and asking for new "organic" sources of revenues. They want more innovation and they want results–now. Still, they also worry that their efforts will not deliver, in terms of either growth or profitability. Too often, companies increase R&D spending but fail to see any major change in the return on their investments.

The problem is that innovation is an act, not an idea. Too many people believe that an insight will carry the day. Rarely are they right.

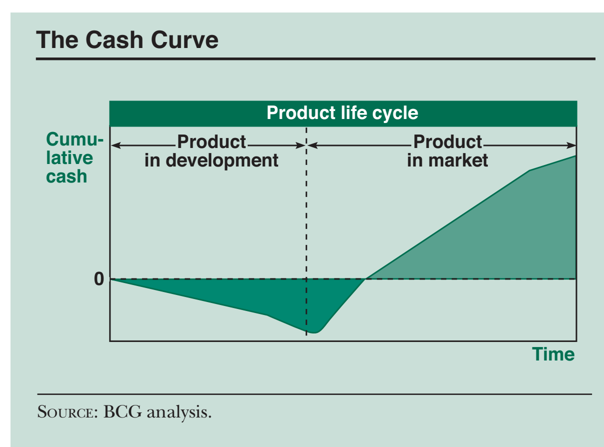
Successful innovation–which is to say, *profitable* innovation–depends on the entire set of actions that are required to turn an idea into cash returns: the *innovation-to-cash* (ITC) process. This process cuts across organizational boundaries and presents many difficult choices. It must be explicitly, and thoughtfully, managed. When it isn't, the damage shows up in companies' results: lost profits, wasted resources, and little or no growth.

Let's be clear, though. The managerial challenge is not to "integrate" all the separate steps and functional decisions of the ITC process. Rather, it is to have the rigor and discipline to evaluate and manage the inherent tradeoffs–consistently and across a whole portfolio of different innovation efforts. This takes real collaboration and problem solving, not just better handoffs between functions.

Managing the "Cash Curve"

Despite the many uncertainties of innovation, it is possible to assess, at the outset, the likely impact of different approaches to managing the full ITC process. This is accomplished by examining the "cash curve" of an innovation. A cash curve depicts the cumulative cash investments and returns for an innovation over time. It runs from the very beginning of development until the point at which the product or service is removed from the market. (See the exhibit below.)

Clearly, management's decisions affect the shape of the cash curve and also determine its dynamics. As a result, managers need to understand and openly discuss how, say, "pushing" the curve in one place horizontally or vertically is likely to move it someplace else–and how other actions can enhance or dampen that movement.



SOURCE: BCG analysis.

Consider the example of a manufacturer trying to develop a product that is new to its market. Because it knows its customers well, has manufacturing plants around the world, and has solid design expertise, the company's first inclination is to go it alone. After all, why share the margins? However, because the product is a breakthrough, plants would need to be retooled and some new critical R&D skills acquired. Moreover, marketing and launch expenditures would be higher than normal. In addition, new technology in the product and customers' lack of familiarity with its application would add time to development and slow market penetration. When all this is considered, the cash curve our company creates for its breakthrough may not look so good after all.

There are, however, other ways to bring the innovation to market, with different effects on the curve. For instance, could risks be shared and market penetration accelerated by "orchestrating" the process? This could mean acquiring, rather than developing in-house, some of the required technologies, and focusing instead on design and marketing. Or it could mean turning to other organizations to handle the manufacturing or supply chain activities. Indeed, there are three basic ITC approaches to consider: the Integrator, the Orchestrator, and the Licensor. Each approach has different strengths, weaknesses, and requirements—so each is better or worse suited for different innovations, situations, and companies. (For more on this subject, see "Innovating for Cash" in the September 2003 issue of the *Harvard Business Review.*)

By carefully modeling the impact of different choices on the cash curve of an innovation, managers have insight into the relative impact of key drivers of value. This approach also provides a mechanism for raising important questions about risks—for instance, would our manufacturing company's culture actually allow it to be a successful Orchestrator rather than the classic Integrator? In addition, the curve offers managers a basis for discussing possible interventions to reduce the risk of failure. For example, could project management enhance coordination with new suppliers? Does the company need to beef up management of its intellectual property? Could promotions enhance word of mouth and accelerate sales? Too often, these questions are never asked, let alone answered.

The bottom line is that financial analysis of innovations, which is fairly common, combined with a dynamic view of the cash curve, which is rare, blends strategy and execution. It can make the difference between developing another inconsequential product or service and winning big—because it gives the top management team a language for and an appreciation of interrelated financial, market, and technology risks. In the end, executives have common ground to make better tradeoffs and break compromises.

Not Just One Curve, But Many

Of course, it's not a matter of managing just one cash curve. To grow consistently, companies need a much more consistent series of hits, both big and small. This means coming to grips with a full portfolio of innovations, aligning investments explicitly with the overall strategy, and ensuring that someone is actually accountable for the performance of the entire process.

Revitalizing the Portfolio. To get more out of innovation spending throughout a company, management must successfully handle an entire portfolio of cash curves. It must decide on the right balance of spending across a range of initiatives: maintenance projects (in essence, keeping market share), incremental projects (gaining share), and breakthrough projects (entering completely new markets). Which mix is right, given the competitive environment? Where do you want to be? Where do you need to be? What will get you there? Then, how do you align your resources and, more important, your people with these different priorities? No one can do it all.

Tradeoffs need to be made regularly and rigorously to maintain the desired balance in the portfolio. Too often, companies let the "walking dead" (projects that should be killed) live far too long. As a result, winning projects are often starved for resources, frequently in the name of "balance," "fairness," and "hedging our bets." Bad projects–and virtually every company has some–can be extremely controversial. Typically, a manager has invested so much in a project that he or she cannot bear to see it fail. Using the cash curve as a lens to evaluate such projects can make it clear that they will never pay off. Fewer projects, with bigger potential payoffs and faster development tracks, should be the goal for just about any company in any industry.

Linking Innovation with Strategy. Decisions about innovation shape a company's future. The outcomes determine cash flow and competitive position. But too often, innovation is managed in a largely random fashion, rather than explicitly linked to strategy. Investments of capital and great people (always scarcer and more valuable than money) are typically based on budgets, not on strategic goals.

Like any major investment, innovation needs to be focused on clearly defined objectives. This requires a view on where innovation is possible and to what degree. It means understanding whether the ideas can be developed within a company or whether the company must look outside. It means selecting an appropriate strategic approach, such as fast follower or first to market–because each may be right in different situations, depending on the objective. It means understanding how different investments in different types of innovation–breakthrough versus incremental versus maintenance–match up with the overall strategy. Most of all, it means accepting the risk of being wrong, but doing everything possible to be right.

Again, companies also need to decide precisely when and where to use different innovation approaches. Each of the three ITC approaches represents a different way to allocate risk and cash flows. Thus, the choice is highly strategic yet often poorly considered, if it is considered at all. Already, though, some leading companies are using all three. More companies will need to learn how to do so.

Ensuring Accountability. In many companies, no one "owns" innovation; instead, it is the responsibility of many. Too often, this means that no one is actually accountable for the "cash" part of innovation. ITC must be subjected to the same culture of accountability and measurement that governs other processes. Accountability for results, authority to make things happen, and a clear view of current performance are critical if a company is serious about generating more cash.

It is impossible, however, to manage something that can't be measured. Innovation is often seen as something that just "happens,"

and trying to track its progress seems either futile or a restraint on creativity, or both. Often, management defaults to a single number or two that are easily measured—for example, corporate revenue growth. Yet the ITC process must be measured, and measured rigorously. A carefully constructed suite of measures is required. Inputs such as time, people, and cash need to be carefully tracked by project and product. In addition, measuring the performance of the process itself (for instance, the time to market relative to certain benchmarks) is important. Is the process performing as designed? Finally, critical output metrics such as new cash generation, market share in new segments, and true new markets entered provide essential information.

In the end, it is undeniably difficult to measure innovation, and no suite of metrics will ever be perfect. But companies should measure the performance of their ITC process if they want anyone to manage it—and be accountable for it.

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None of this is to say that ideas and creativity don't matter. They do. But ideas are not innovations. We hear far too many executives talk about their great ideas and bemoan their inability to profit from them. Companies must make a basic choice about their innovation efforts: whether to be innovative or whether to be an innovative enterprise. After all, there is a world of difference between the two. The former produces lots of great ideas but often has little to show for them.

By contrast, innovative enterprises use their ideas to produce competitive advantage, superior shareholder returns, and, above all, cash. There are precious few of these companies, and they stand apart from the pack. They manage the innovation-to-cash process aggressively and well. They grow. And, most of all, they make innovation pay.

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This article is the second in a series of Perspectives on the innovation-to-cash process. The first, "Innovating for Cash," was published in December 2003.

Other BCG publications on the topic include:

"Profitable Innovation in Financial Services,"
Opportunities for Action, April 2004

"Innovating for Cash: Lessons from the Handset Wars,"
Opportunities for Action, January 2004

Raising the Return on Innovation: Innovation-to-Cash Survey 2003,
A BCG Senior Management Survey, December 2003

"Innovation to Cash: Orchestrating the Process,"
Opportunities for Action, September 2003

"Boosting Innovation Productivity," Opportunities for Action, April 2003

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