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Innovation

A New Approach to Strategic Innovation

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Nik Mirus

Summary. Companies typically treat their innovation projects as a portfolio, aiming for a mix of projects that collectively meet their strategic objectives. The problem, say the authors, is that portfolio objectives have become standardized, and innovation projects are often only... **more**

Companies typically treat their innovation

projects as a portfolio: a mix of projects that, collectively, aim to meet their various strategic objectives. Some projects, for instance, will improve business processes, others develop new products and services. But while the portfolio concept can be helpful, our research suggests that portfolio objectives have become overly standardized. Most companies, in other words, seek similar portfolio objectives, such as achieving a balance between making incremental improvements and applying new technologies. All too often, executives carefully evaluate individual projects along standard performance metrics such as net present value, but they spend little time thinking about what types of projects the company's competitive positioning needs beyond the general notion—borrowed from finance—that diversification reduces risks. As a result, companies' innovation projects tend to be only weakly related to their distinctive strategic goals, and at worst, they work against its strategy.

When we surveyed 75 companies in China, we discovered that when executives took the trouble to link their project selection to their business's competitive goals, the contribution of their innovation activities to performance increased dramatically. This article introduces a strategic innovation tool kit we developed to help companies align their innovation investments with their unique competitive strategies. We tested the tool successfully across 10 business units at five companies.

Creating Strategic Alignment

Our tool kit is anchored in two graphics that, taken together, help companies relate their innovation projects to their strategic goals. Companies begin with an examination of their business strategy.

The Strategic Innovation Tool Kit

Our innovation tool kit consists of the strategy summary framework and the innovation basket. As leadership teams work through these exercises, they will gain consensus on strategy, identify threats and weaknesses, translate those weaknesses into innovation goals, and cultivate a collection of innovation projects that support their strategy. Evaluation of the basket may also trigger a change in strategy.

Using the what-who-why-how framework, management teams clarify their business unit's strategy. From there, they ask a fifth question: "What needs to change in order to achieve our strategy?"



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Achieving consensus and identifying strategic change needs. In almost half the companies we have worked with, members of the management team held varying understandings of their company's strategy. Our process is designed to get business unit leaders on the same page. We ask them to list their unit's strategic goals (for example, growth or profits) and succinctly characterize their business unit's strategy. For this, we use the widely known 3W1H (what, who, why, and how) framework, plus a fifth question on weaknesses, but other frameworks may also be used. Completing this exercise helps leaders articulate a shared view of their strategic position, which will enable them to reach the strategic goals.

The last question in our process identifies *change needs*. These change needs reflect weaknesses in the company's current strategic position (for example, "Our costs are too high," or "We are not addressing a key customer segment," or "Our competitors are coming out with a new product generation that will make our functionality insufficient"). These weaknesses often signal innovation opportunities; it's not coincidental that a widely accepted definition of innovation is "any deliberate change that helps the strategic position of the organization."

Creating the innovation basket. The process of categorizing innovation projects is the next step, and it is where our process deviates from established frameworks. We use the word "basket" rather than "portfolio" to denote a company's collection of innovation projects. In this way, we differentiate the concept from finance and avoid the mistake of treating projects like financial securities, where the goal is usually to maximize returns through diversification. It's important to remember that innovation projects are creative acts, whereas investment in financial securities is simply the purchase of assets that have already been created.

The top row of the basket lists the change needs from the first exercise, now framed as the innovation goals that projects are expected to address. Examples include reducing manufacturing costs, improving quality, developing new products, creating accelerated or more-flexible sales processes, and introducing an after-sales service process or a sales channel in a new country. The left-hand column identifies where in the unit's business model the project is expected to add value, such as its brands, product lines, or market segments. Designing an innovation basket will launch a creative discussion of what opportunities exist and how they can be translated into projects that support the unit's strategy.

Unlike a portfolio, the basket is customized to the business unit's strategy and organization. The goals in the framework are not generic: They directly reflect the company's strategy for the unit —and identify which part of the business model they'll add value to.

Filling the basket. Next, executives locate the company's existing innovation projects in the basket, with the understanding that some may straddle multiple goals and areas. For each project, leaders should ask, "How does this help the unit achieve its strategic innovation goals?" Or, put another way, "How does it address our strategic gaps?" If a project addresses an identified change need, it fits the strategy and belongs in the basket. But in many cases, projects may deliver different changes from those identified as opportunities, or little change at all. Those go into the "unaligned" column. Some projects may deliver a financial benefit that does not translate into sustainable competitive advantage. In those cases, if they are not too advanced they should be dropped.

Once the basket has been winnowed of projects that do not align with strategic goals, it's time to begin adding new ones that are consistent with the strategy. This should not be a top-down deductive process but rather a creative endeavor, carried out in workshops with the management team and relevant experts. It will require substantial contributions of project ideas from frontline staff, who often know a great deal more than management might expect about what adds value to the unit. Designing an innovation basket will launch a creative discussion of what opportunities exist (much as what takes place in a designthinking workshop) and how they can be translated into a collection of projects that support the unit's competitive strategy.

After the business unit has gone through the basket cycle a couple of times, the alignment won't need to be designed from scratch again. It will evolve with the strategic environment, the strategic position, and the basket's own contents as projects are finished and removed, allowing room for new ones to enter.

Evaluation of the basket may trigger a change of strategy. It may, for example, reveal aspects of the competitive position that were overlooked or new opportunities that could deliver significant value. In such cases the management team needs to revisit the strategy to determine new goals before resuming the basket cycle.

Putting in the numbers. Only after the basket has been filled and reviewed a few times should managers introduce numbers. They can establish targets for each innovation goal (such as reducing unit cost by 10%, launching one new product for each product line, reducing product failures to less than 1% per month, or establishing a functional sales channel in the EU capable of selling 100,000 units within nine months). The basket can then be evaluated by how many of the goals the current slate of projects can deliver on (and, at the end of each year, how much was delivered). With that information, priorities across goals and areas can be established.



In his series Deconstructed Maps, Nik Mirus rearranges and reconstructs old city plans with colored gels and plexiglass, playing with notions of experimentation and possibility.

It's important not to get to numbers too quickly, because doing so may encourage people to shut down creative options and instead propose only what they can immediately prove. We also caution against letting this part of the process become a formal optimization exercise, in which project selection is driven by an algorithm that precisely weights each project according to its potential for achieving goals. Optimization is inflexible and not transparent and may depend upon standard metrics that do not reflect the dynamics of the environment. Discussion of and commitment to what may seem like a "suboptimal" basket is, after implementation, often superior to what appears on paper to be an "optimal" basket but the story behind which the management team does not fully grasp.

Let's look at how the entire process plays out in practice.

Achieving Focus at Glass, Inc.

We studied the optical devices division of Glass, Inc. (not its real name), a diversified Chinese company. Management felt that growth was suboptimal across the unit's three market segments: telescopes and binoculars, manufacturing optical sensors, and security optical sensors. These three segments became the rows of its innovation basket. The management team embarked on the process we just described in order to identify innovation opportunities within those segments that could deliver its strategic goal of 25% growth per annum.

The team applied the questions of what, who, why, and how to describe the business unit's current strategic position, which is shown in the exhibit "Understanding Strategy at Glass, Inc." The exercise identified several strengths and revealed several vulnerabilities—specifically, a cost disadvantage, products whose functionality had become stale, too few new products, relatively weak service in two of three segments, and an aging technology base. (To preserve confidentiality, we aggregated information from the unit's three market segments in the exhibit.)

Understanding Strategy at Glass, Inc.

The unit started by asking four questions to clarify strategy and help set innovation goals. The answers to these questions revealed strengths and weaknesses. The weaknesses, or change needs, then became the unit's five innovation goals.







When the business unit placed its innovation projects in the basket, it realized that its investments were not aligned with its strategy, prompting the team to stop some projects, create others, and ultimately rebalance its investments.





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These weaknesses required strategic changes and became the innovation goals against which the existing innovation basket (projects that were already underway) was evaluated. This exercise revealed that the lion's share of spending was going to new products, which accounted for roughly 80% of the \$42 million innovation budget. The other innovation goals were only weakly supported, especially service improvements.

The management team members realized that they had never intended for the unit to have such a strong focus on new products. They diagnosed the cause of the disconnect. Targets for annual revenue growth had compelled management to constantly look for extra revenue, and the path of least resistance had been to develop and introduce incremental product offerings in niche markets. The resulting product proliferation spread resources thin without strengthening competitive advantage. As the unit CEO reflected, their focus on offering a wide swath of products to achieve short-term revenue goals had put them in a weakened competitive position.

Not only did the innovation basket need to change but so did the unit's strategic goals and how it measured progress toward them. The team went back to the drawing board and embarked on a second cycle of discussions around goals and projects. A month later, the innovation basket was markedly different. The unit CEO requested that the group CEO give the unit three years to deliver a strategic change, during which time, instead of relying on the company's standard performance measures, it would track progress toward the innovation goals. To help the unit get started, we conducted a basket-creation workshop based on the principles of design thinking, and the unit conducted three additional workshops on its own. We asked each participant to write down three innovative ideas that would strengthen the unit's strategic position, which were then discussed, evaluated, and refined in groups of four or five people. Each group presented its three best ideas to the whole workshop, and an idea bank was created.



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After much discussion, workshop participants recommended reducing their product lines from four to two, discontinuing 13 of the 33 projects in process, and creating three new projects (two of them from the idea bank). In order to ensure implementation, they created four product-development task forces and gave them each a significant budget. Each task force developed a product that it believed had a potential competitive advantage and had one of the four vice presidents as its chairperson.

The realization that Glass, Inc.'s optical devices division was working on too many unproductive niche products in response to an overly narrow performance metric enabled the group to focus on a smaller number of products with higher potential. Indeed, with more-competitive products, cost-reduction innovations became less urgent and were reduced, while functionality improvements of existing products, technology investments, and service development were increased. This resulted in a 19% decrease in the total innovation budget—from \$42.2 million to \$34.1 million. It would be a mistake to conclude from this example that the primary value of the innovation basket is its ability to manage innovation more efficiently, though that may certainly be a bonus in some cases. Engaging with the basket-creation process can lead to a fundamental change in strategy. Let's look at a case in point.

Strategic Reinvention at BAT

When the lead-acid (LA) battery unit of the battery company BAT (not its real name) used our process, it had a transformational impact on both competitive and organizational strategy. BAT saw considerable opportunities in the rise of renewable energy and had created a specialist unit for developing large lithium batteries to store energy produced by wind farms, solar arrays, and other renewable sources. But it still believed there was growth potential for the "old" lead-acid technology in car batteries, and it set an annual growth target of 30% for this market.

The LA battery unit's primary customers were automotive manufacturers (for new batteries) and dealers and repair shops (for after-sales replacement sales). As long as combustion-engine cars continued to be sold, BAT thought, lead-acid batteries would remain profitable. The LA unit had significant strengths: in particular, low-cost and high-quality products, a wide product range, effective service processes, and competitive product features. It also had a relatively large innovation budget for its size; it invested roughly \$20 million annually in approximately 40 projects. But generating growth at the targeted level would require winning new customers, which meant developing new products with novel features and premium product performance. The unit needed to identify which projects to double down on.

When we worked with the unit's top managers to apply our basket analysis to its innovation activities, we uncovered a disconnect between what the leaders thought they were doing and what was actually happening. They thought their innovation projects were focusing on new-product development and significant feature upgrades as a means to drive new growth. But in the unit CEO's words: "To our dismay, the innovation basket showed us that we were spending an excessive share of our innovation budget on cost and quality." The team had been drawn to low-risk projects, in part because the company used quantitative (NPV-related) criteria to choose projects. As a result, new proposals had "drifted toward conservativism," the CEO told us.

The unit managers held two rounds of discussions to identify potential LA opportunities from industry trends and analyses of customer demand. They identified just one: developing extremely compact LA batteries with a slightly lower charge capacity, which would marginally reduce the costs of producing traditional cars. This led to an epiphany: Focusing on LA technologies could not generate sufficient growth in the automotive battery market. Even for combustion-engine cars, LA batteries would gradually give way to denser low-voltage lithium batteries. Moreover, electric vehicles used, in addition to their high-voltage power packs, low-voltage auxiliary batteries that required lithium.

Applying our basket analysis to the unit's innovation activities uncovered a disconnect between what the leaders thought they were doing and what was actually happening.

The management team decided it was finally time to consider switching technologies and organized a task force to develop new lithium batteries for the low-voltage car accessories network. The unit did not have to develop the technology from scratch; it could build on the power packs in the lithium battery business unit and in collaboration with a university partner, modifying the technology from high to low voltage and building capability in the new technology in the process. From a company perspective, this decision made sense: The existing lithium unit did not have access to carmakers and dealers, and it was easier for the LA unit to adapt the technology to customer needs than for the lithium unit to develop an understanding of the market needs. This represented a major departure from the business unit's original strategy, and it enhanced collaboration across units.

After four months of work, BAT had a significantly changed innovation basket. Cost reductions and quality improvements remained important and were strengthened. However, management's decision to pursue the large growth opportunity in lithium auxiliary batteries resulted in the doubling of the innovation budget to \$40.6 million, with a \$20 million investment in an R&D project to develop lithium starter batteries in collaboration with an external research institute and the BAT lithium unit.

As this case illustrates, explicitly exploring the links between a company's strategy and its innovation investments can be transformational. The process helped BAT reposition itself to take advantage of strategic changes in its markets, resulting in a major new investment in a project that straddled traditional boundaries.

A Culture Shift

The process we've explained in this article won't always feel comfortable for managers. In the idea-generation workshops and during strategy discussions, people must feel safe to comment outside their area of expertise and to engage their colleagues even those above them in the hierarchy—in constructive debate. C-suite executives must be willing to be challenged by colleagues. Not all management teams are prepared to do this.

Functional departments, which often enjoy relative autonomy if they meet their KPI targets, will also experience a culture shift. For the basket process to fulfill its potential, each functional unit must be ready to negotiate its priorities more explicitly with colleagues in other functions. Marketing must negotiate with R&D, and both with manufacturing and service groups. The behaviors necessary for such negotiations cannot simply be mandated; they must be learned.



Nik Mirus

A more general challenge is that managers tend to favor decidethen-act processes, a bias that was present at both our case examples. Once leaders reach a decision and set a progress goal for employees, they move on and stop paying attention to what's been decided. But for our process to work, top management cannot do that. Reducing the connection between a company's strategy and its innovation activities to KPIs hamstrings the organization's ability to respond and change. It has long been said that action comes not from rational deliberation but from emotional engagement, and we see this time and again in our work. The alignment of the change goals to the strategy that the managers have embraced triggers a sense of urgency, and the bottom-up creative involvement sparks enthusiasm and positive energy. Used in this way, our innovation project-alignment process does not merely help decision-making, it fosters motivation and a readiness to act.

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The examples we've discussed demonstrate how the innovation basket process not only helps managers implement strategy but also helps them shape it. It gives them a window into what their innovation activities are really doing for their strategy. The generic risk-reward criteria of traditional portfolio approaches are unlikely to generate much insight, and therefore do not stimulate the type of discussion top managers need to have. Ask yourself: Do you really know how well your innovation investments are aligned with your strategy?

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