# Options at the Gate

By Lanny Vincent

Using a stage-gate framework has become a basic method for new product development efforts. Staging investments based upon progressive results makes sense especially when the risk of failure is greater in developing new products than in improving current ones. Stages acknowledge the learning curve an idea must traverse as it develops into a concept, then into a working model, and then into a standard product made in a reliable and reproducible way. Putting up formal gates between these stages enforces a discipline on the new product development process and provides explicit places where efforts are reviewed and given a Go or No-Go decision. Clear expectations and well-chosen gatekeepers at each gate prevent flawed projects from progressing further than warranted; however, there are no guarantees.

While stage-gate frameworks are necessary, they are not sufficient. Designations of stages and gates represent only one component of what is required for a more complete and sustainable innovation system. Other major components include portfolio diversification and management, a consistent options creation engine, and a "learning commons."

These three components, along with the application of stage-gate disciplines, can make a company's innovation efforts more syste...atic and sustainable. When approached and defined as a complete system, a company has a much better chance to avoid expensive and wasteful re-learning and can steadily improve its innovation capability–perhaps the only true sustainable competitive advantage. When the innovation system is sponsored and governed explicitly a company can improve its financial returns and recover its entrepreneurial roots.
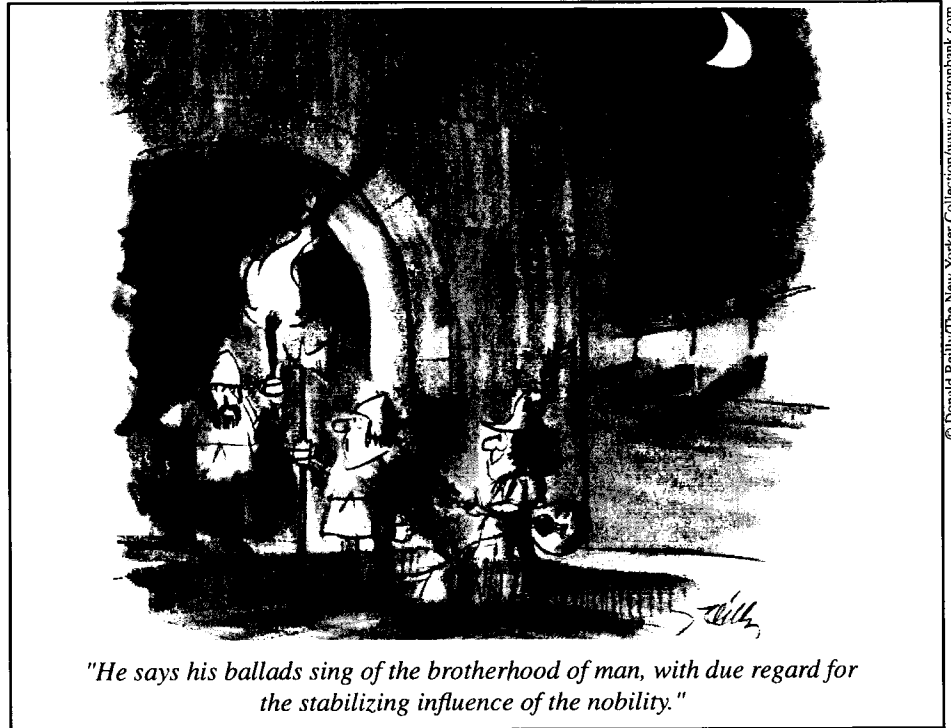
"He says his ballads sing of the brotherhood of man, with due regard for the stabilizing influence of the nobility."

Portfolios

When initiating stage-gate processes, many discover that while they have improved both the discipline of project teams and their own spending confidence on a project-by-project basis, they have done little to diversify the risks. Stage-gate works well when applied to defined projects with explicit milestones and stage-limited budgets. However, stage-gate management is not portfolio management. Having a deliberately diversified array of projects spreads the risk and can enhance learning across projects. While a company may have more projects in the earlier stages and fewer in the later stages, hedging risk by spreading the bets is simply a wise move.

In addition, as is now becoming increasingly recognized, it pays in the long run to allow some room for learning to occur from the adaptation and refinement of projects as they develop. If portfolios are too full and staff is spread too thinly across too many projects execution (or filling orders) trumps development and learning suffers. This increases the chances of wasteful re-learning. It also makes sense to engage some of the same gatekeepers in portfolio management and reviews. This overlap enables improved discernment for both the gatekeepers and the portfolio-keepers.

Options creation

Another vital component of the innovation system is having a consistent effort at the "front end." Stage-gate processes often get extended into the front end, seducing many into thinking that the front end is simply another stage. In fact the front end of innovation is less a stage and more a field. Michael Kennedy demonstrated in his book, *Product Development for the Lean Enterprise,* that this front end field is where more gains can be made at less cost and in less time than in the later stages of the development process. Kennedy says, "The cost of examining an alternative significantly increases over the life of the project because of the broad impact of changes in the later stages of design. In a set-based approach, the alternatives are explored early in the process when costs are less. The result is more innovation in less time and at much less cost." Without viable "ready" options at the front end, companies often keep investing in projects that are no longer compelling.

Over the past 30 years of consulting with

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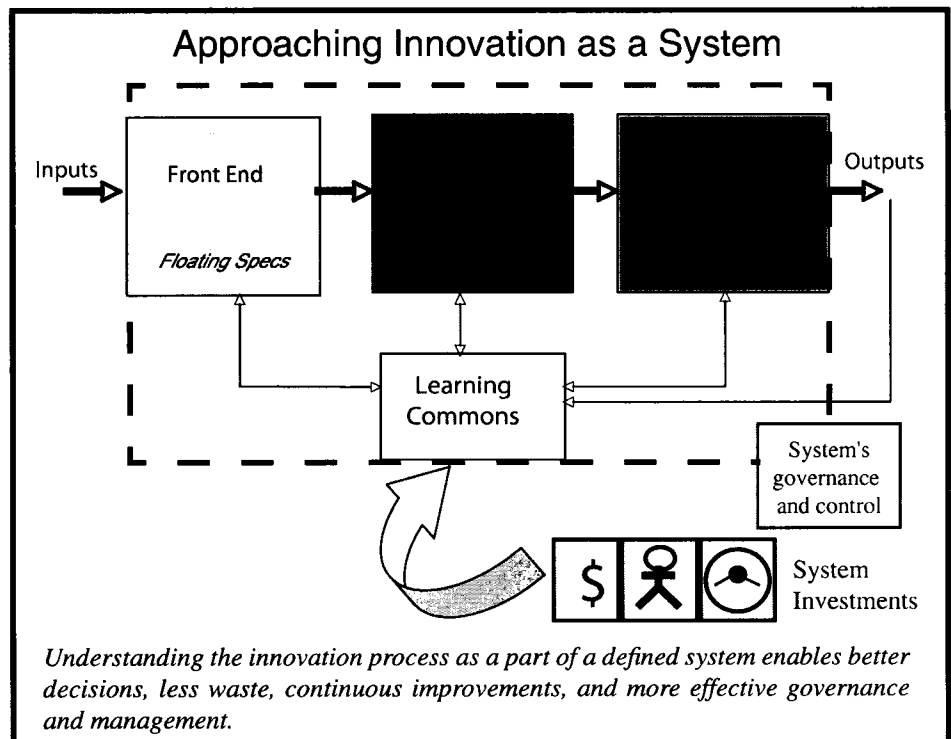
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companies about their innovation systems we have seen companies repeatedly cut, slow and even stop their front end efforts. Often they say they have too much to digest in their pipeline. Then 18 to 24 months later, they look ahead only to realize they don't have a sufficient set of ready alternatives for what's next. Gearing up again inevitably requires some time and these delays in turn often cause over-compensating "fast track" efforts in an attempt to catch-up. In the process, the new options created end up being incomplete and un-compelling.

Companies that have learned this lesson keep their front-end efforts sustained even in difficult economic climates. Instead of shutting down these efforts when resources are severely constrained, these companies become more deliberate in aiming their front-end options creation engines on well-considered targets. Hewlett-Packard calls these Markets of Interest. At Kimberly-Clark we called them target arenas. Whatever these target areas are called, when company leaders are able to effectively communicate to their employees where innovations are needed and why, we have consistently seen responses from the innovator community that are vigorous and robust.

Learning Commons

The stage-gate process is an indispensable tool for specific projects, but it doesn't provide for an often-neglected component of a complete innovation management system. That is a learning commons. A learning commons is enabled by knowledge management software and systems to provide for the sharing of explicit knowledge. There are many promising IT options, but IT is only half of the solution. The other half is the human system, because learning occurs in and through people, or more precisely, in communities of practice. As Ikujiro Nonaka and Hirotaka Takeuchi observed in book, *The Knowledge Creating Company*, it's not what a company knows that makes it successful. Rather, it is the company's ability to create new knowledge, and this can only be done if it is constantly up-to-date on what it already knows!

Collaborative project post-mortems and

Approaching Innovation as a System

Understanding the innovation process as a part of a defined system enables better decisions, less waste, continuous improvements, and more effective governance and management.

debriefings are but two routines which when conducted regularly can add both new process and content knowledge to a company's learning commons. When fresh first-hand experience is spoken, heard and captured, an organization can share it more widely with others in the organization. In the sharing, additional learning is stimulated, which can be reapplied in a succeeding context. Here is where information and knowledge often become easily confused. While information can be shared easily and efficiently, knowledge is not so easily shared. Unlike data and information which can be received, knowledge must be understood if is to be received. As the old adage goes, "tell me and I will forget, show me and I may remember, involve me and I will understand." Experience, community and context are all a part of gaining understanding.

When the oral tradition gets translated into the written form and made distributable, only half the job is done. The other half is translating what is written into the understanding of people without whom nothing gets done. This second translation requires dialogue, collaboration, face-to-face time and presence, and patience.

Gate 0

When innovation efforts are viewed as

a system, each part making an essential contribution to other parts and all parts contributing to the whole, it becomes clear that in the stage-gate process, Gate 0 is a place in the system that can have the greatest influence on the entire system. Creating a fresh batch of Gate 0 ready options for gatekeepers to have in mind at each gate makes every GO decision a stronger commitment. The decision was made with alternatives in mind. When these options are informed with deliberate targets and understanding from the learning commons, leaders can be confident that the projects being advanced in their pipelines are the right choices.

A next step in the evolution of effective innovation management is to view the new product development process as not only a process, but also as a system. Viewing it as system is especially helpful when looking at the course of concurrent and successive efforts in development. In his book, *Management: Tasks, Responsibilities, Practices,* Peter Drucker said "a business enterprise has two, and only two, basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs." Investing in a management system that supports innovating is a wise and lasting investment; perhaps one of the best investments a company can make in the long run. ❑