Stage Gates: Good or Bad for innovaiton?

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Is the Stage Gate process model good or bad for innovation? Like innovation at its core, the answer is a paradox: yes and no. It is vital to the management of incremental innovation, but it tends to kill potentially big, breakthrough ideas before they have a chance to prove themselves. It's all about the differences in sponsorship, goals and metrics. Here's why:

Stage Gates

The Stage Gate Process Model was created Dr. Robert G. Cooper and was introduced in his 1986 book, "Winning at New Products." It was created to help management prioritize candidate new ideas and allocate scarce resources better by weeding out those ideas that have the least potential, while supporting those with the most potential.

The process creates a number of Gates, which are key decision-making points along the developmental path of new ideas, regardless of industry. It's about prioritizing, funding and tracking the multitude of candidate innovations that most senior managers are considering at any given time. In its original form it had five Gates. Since then a Discovery Stage has been added at the front end as stimulus for idea generation before the first screening Gate.

Stage Gate models provide rigorous, measurable "hurdles," over which an idea must pass if it is to be approved for movement toward the next Gate, with the ultimate goal being market launch. The concept is as simple…and complex…as that. And it should not fade away like so many business fads, because the need for innovation will only grow stronger and Stage Gates is a sensible tool for managing one end of the innovation spectrum: incremental innovation.

The Innovation Spectrum

The Innovation Spectrum

Incremental **Breakthrough** **Transformational**

1. **Transformational Innovation**

There are three levels of innovation that an organization can choose to pursue: incremental, breakthrough, transformational. Transformational is the most difficult because it changes the way we live and often makes big companies, even whole industries, obsolete in a short period of time. Most organizations are loath to pursue ideas that will make themselves obsolete. Unfortunately, this is one of the reasons that they die. The computer and entertainment electronics industries have been prime examples of this. How many of us have audio 8-track machines, cassette players, videotape cameras, recorders and players, bag phones, clunker desktop computers, etc. sitting in our basements? I have a reel-to-reel tape recorder at home.

In most cases transformational innovation starts in someone's "garage;" by a visionary outsider. It rarely happens within the walls of an organizational structure. For this reason I will concentrate for the rest of this white paper on the other two types/levels of innovation: incremental and breakthrough.

2. <u>Incremental Innovation</u>

If transformational innovation sits at one end of the innovation spectrum, then the opposite end is Incremental Innovation. This is the kind that most of us are used to pursuing. It focuses on the kinds of improvement that keep a product, brand or company in the game. They tend to be line or brand extensions, new bells & whistles, new packaging, new improved ingredients, etc. In fact, an Advertising Age innovation study several years ago concluded that over 60% of innovations claimed by the consumer products industry were nothing more than packaging improvements.

Nevertheless, it is incrementalism that fuels most of the competition experienced in any industry. And it is this type of innovation that requires:

- Multi-disciplined, cross-functional collaboration
- Strong, definable metrics at each decision-making point (i.e. Gate)
- Consensus-based decision making between multiple stakeholder functions
- Internal competition for people, money, and operational resources, such as:
    - R&D
    - Packaging development
    - Qualitative and quantitative market research**
    - The interruption of production lines for short, unprofitable test market runs
    - Distribution channel support in small test market geographies where channel competition is fierce enough for the established brands (who has the bandwidth to push the new ones [sales] or hear about them [buyers]?)
    - Promotional and advertising development
    - Etc.

The amount of resources that are made available for this type of innovation are almost always tied to current business performance; available in the good times and one of the first things to be cut in the bad times (right after the ad budget).

The Stage Gate process was created to help companies get their arms around the overwhelming number of innovations that come at management every day. They help make order out of chaos, while conserving and focusing vital resources on those few new ideas that any organization can handle in a year. The Stage Gate process also helps to push decision-making down to the appropriate levels of the organization; the ones closest to the customer. And finally, because the decision-making is pushed down, it requires more cross-functional agreement on a new idea before something can move forward.

As I've said, incrementalism is about resource allocation and measurement. For all of these reasons Stage Gate models have been enormously helpful in managing it.

** **Note:** Business-to-business companies tend to refer to their purchasers as customers. Consumer-oriented industries tend to refer to their distribution channels as customers and their end users as consumers. In this paper, for simplicity purposes, I will refer to them all as customers.

So, what's the problem? Nothing, as long as there is a parallel process for the exploration, invention, testing and launch of potentially breakthrough innovations, those that change the game. Unfortunately, because the Stage Gate process has been such a successful tool for decision-makers in managing incrementalism, too many organizations assume they can use one process for achieving two ends: incrementalism **and** breakthrough.

3. Breakthrough Innovation

Let me clarify one critically important point before providing an overview of the rationale for a developmental model that nurtures breakthroughs: As Jim Collins likes to say: **This is not about an "OR" (Stage Gate process or XXXX). It's about an "AND (Stage Gate process and a Brekthrough process**," the creation of two developmental processes that complement each other and work in concert to support the parallel goals of good, sound incremental innovations and the riskier breakthroughs.

Breakthrough innovation falls between incremental and transformational on the innovation spectrum. It requires significant change on the part of the innovating organization, both in terms of cultural and systems support. It creates true competitive advantage for a sustainable although increasing shorter period of time and it involves significantly more risk-taking, which is why the decision-making that results in true breakthroughs must in many ways be the opposite of the decision-making that supports incremental innovation. It must be sponsored at the top.

Breakthrough ideas create new markets and business opportunities that did not exist before. Therefore, there is no "frame of reference" upon which to deliver the metrics called for by a Stage Gate process. Customers don't have a frame of reference by which to easily judge the idea, business analysts have no track records – no sales numbers, no relevant trial or repeat data, etc. upon which to build volumetrics. For this reason breakthrough needs the higher level of consideration and judgment that requires senior management involvement. It's about pushing decision-making up, not down.

Breakthrough initiatives must still have evaluation measures along the way, but they must be more strategic than the tactical Stage Gate process model metrics. Eventually, by the time a launch is being considered they will need to answer many of the questions that a Stage Gate process asks, but no early in the process where the breakthrough needs to be handled differently.

As an example let's take one that everyone knows about. Assume that several exciting new product concepts evolve from a shared Discovery and Ideation process focused on personal music. One concept envisions a significant improvement on the current technology of portable audiocassette or CD players, like the Sony Walkman™ with earphones. This exciting new idea will allow the user to insert one of each (a CD and a cassette) and be able to program the portable player to either play one and then the other or shuffle between songs on either medium.

A second new product concept envisions a chip-based digital library of songs that can be downloaded from other sources. It is even believed that licensing rights might be negotiable with the music industry, to allow users to download individual songs or whole albums from a company-owned website.

The criteria and decision-making for the first idea at Stage Gate #1 (Idea Screening) would be all over it, because there are frames of reference and recognized metrics for deciding whether to move forward on an idea like this. And they can be pushed downward, requiring minimal attention from senior management.

But what about the other idea, the one for which there are no analogs, nothing to compare it too. And how about the proposition of getting the music industry to play. What were they smoking?

The first idea is a good, solid incremental idea. It would provide something meaningful and new in the industry as it was defined at the time. It would be ready to compete with other ideas for support and resources in a Stage Gate Process. People from every function could wrap their minds around it and see what an improvement it would be. Consensus decision-making could work on an idea like this.

The other idea, obviously the Apple iPod™, would never have made it through the first Gate. The decision-making criteria and need for cross-functional consensus would have demanded unanswerable answers. But always remember what Albert Einstein once said (it's my favorite innovation-related quote of all time): "If at first an idea doesn't seem totally absurd there's no hope for it." Stage Gate processes do not like absurdity and, more importantly, do not know what to do with them other than weed them out.

How did Apple recognize the win in the iPod? The first important difference is the involvement of the top guy in management. Everyone knows that this is the challenge and the genius of working with Steve Jobs. As stated above, only with the sponsorship, passionate support and air cover from the top can a breakthrough, some might even say transformational idea like this survive.

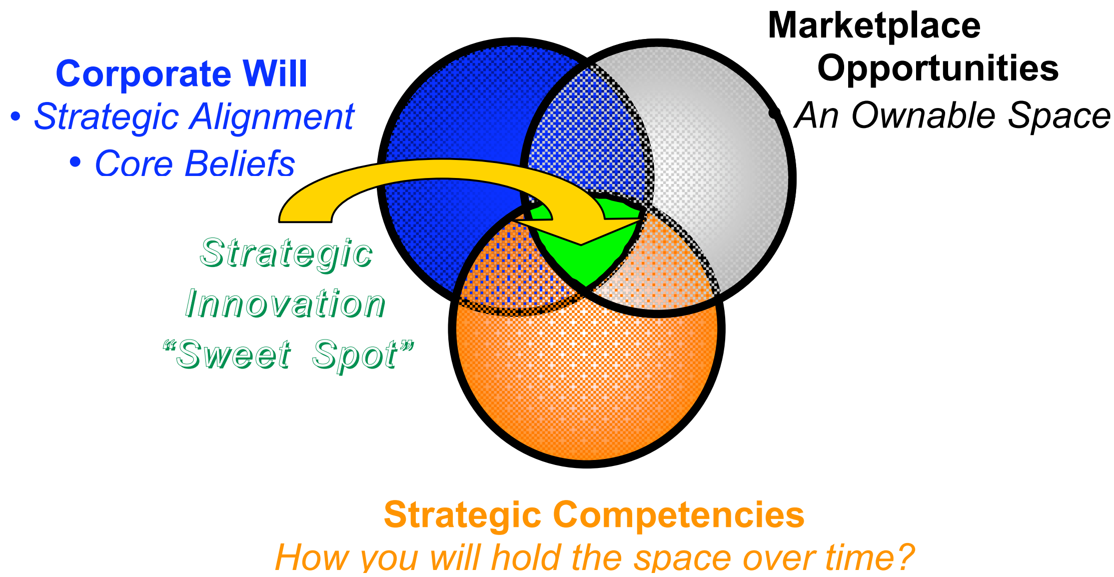
So, what evaluation criteria does a company like Apple use for potentially breakthrough ideas like this? Typically, there are a handful that must be considered, debated by a mid-level and project-level work team with its senior management, to guide and support the pursuit of breakthroughs. Here are three examples of this type of evaluation measure that they might have used. There should never be more than five:

<u>Examples of Breakthrough Innovation Evaluation Criteria</u>

1. Strategic Fit – Does this concept support and build upon the strategic agenda of its senior management?
2. Fit with Core Competencies – Does this initiative leverage existing or latent competencies and, if not, are the competencies available to the enterprise in a way that provides competitive insulation?
3. Meaningful Market White Space – Does this initiative address a real unmet need for a market, and is that market viable (has the money to spend) and at least stable or, better yet, growing at a size significant enough to support a new business concept?

If all three of these criteria are met, the breakthrough initiative falls into the "Innovation Sweetspot," and even if metrics are not immediately available, a clear value proposition for the company can be presented and evaluated.

<u>The "Innovation Sweet Spot"</u>



<u>If any one</u> of these criteria are not apparent, then, even if the idea is a good one, it is not right for the company and should be contested and debated prior to further investment. Breakthrough innovation is scarily un-measurable, especially in the "fuzzy front end," and it requires passionate champions to be leading fully engaged cross-functional teams.

A term commonly used to describe the people who drive breakthrough innovation in large companies is "intrapreneur." These people value and take advantage of the resources and assets of their company to drive it to embrace breakthrough ideas. The guy who dragged Sony kicking and screaming into the electronic games business is a classic example of this type of innovator. But most members of the C-Suite realize that there needs to be a better way of providing for breakthrough innovation to happen.

As the old saying goes, "If you only have a hammer everything looks like a nail." Unfortunately, too many companies try to use their Stage Gate processes for fostering intrapreneurship, for measuring the un-measurable, for handling the passion that the identification and development of breakthroughs requires. And breakthrough innovation teams need sponsorship by and interaction with their senior decision makers, in direct contrast to the Stage Gates goal of pushing decision-making downward (which <u>is</u> the right model for incrementalism).

Here are some suggestions for the development of a process that can work in parallel with Stage Gates for fostering breakthroughs. It starts with an understanding of the impediments:

The three deadliest demands that can be made of any breakthrough process are:

1. Consensus decision-making by the core work team
2. Reporting through layers of approval hierarchy
3. Imposing conventional measures too early in the creation and development process

All of these critical success factors for the development of breakthrough innovation totally contradict what incremental innovation and Stage Gates is trying to manage. Both are needed and, in fact, only by having a good Stage Gate process can a company even entertain the concept of the intrapreneurial pursuit of breakthrough ideas.

The point here is that the organizations that create parallel processes, a Stage Gate-type model for managing incrementalism and a less measurable yet equally disciplined model for stimulating and nurturing breakthroughs is likelier to win in the innovation game.

1. An alternative to consensus decision-making

Anyone who has been involved in consensus decision-making in support of innovation knows one hard truth: consensus tends to result in lowest-common-denominator decisions. When everyone must agree, each with a full vote or veto, the unique edge or that a potentially breakthrough idea might present is likelier to get lost in consensus-based decision-making.

Instead, breakthrough innovation requires the establishment of a decision-making paradox called Championed Teamwork. In this model the team agrees upon no more than two team leaders, both of whom usually have the strongest decision-recommending influence with senior management. Those team leaders are tasked with making decisions and engaging the team behind their decisions to the level of "I can live with it and support it." This requires that those team leaders have the skills to manage this unique kind of team motivation, be they natural skills or those that are taught (yes, they can be taught). In either case the team must be willing to play under this decision-making model before it begins to work together.

2. Reporting through layers of approval hierarchy

In my youth I was selected to be a member of a start-up Corporate New Ventures team for a Fortune 500 packaged goods marketer. We were referred to as "the Chairman's Frustration Group," because new ideas that began in the divisional new product groups as true thoroughbreds were looking like camels and giraffes by the time they arrived on his desk for approval. We reported to him quarterly, with the most streamlined decision-making model I've ever been privileged to be a part of. Our assignment was to "make innovation happen" and we did. There were, of course, serious cultural repercussions (the established brand groups weren't thrilled), but that's a whole other topic and there are now ways of avoiding that pitfall.

There was a critical lesson learned here that did not become apparent until I began consulting in the field of corporate innovation. The truth is that breakthrough innovation can only happen when the innovation work team reports directly to sponsors who can truly make decisions. The obviousness of this is often lost when a breakthrough team is being formed. To make sure that the reporting relationship of the work team is properly structured there are three questions that should be asked when the innovation team is being formed:

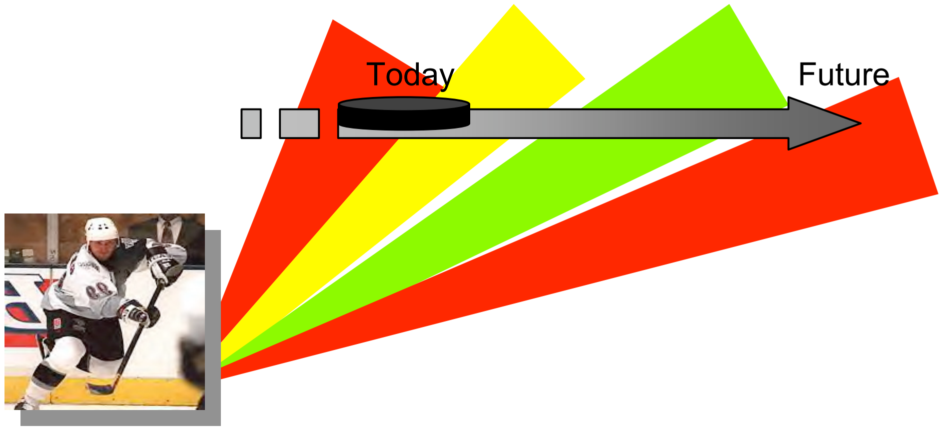
1. If this team comes up with some potentially breakthrough ideas, can their corporate sponsors approve them for development without asking for permission?
2. If yes, can those same sponsors fund in-market tests, rollouts or national launches without permission?
3. If yes, can this team succeed without air cover?

The fact is that most start-up breakthrough units never get past question #1 when they start. Only when the answers to all three are "yes" will you know that the team is reporting to the right level of sponsor.

3. Imposing conventional measures too early in the process

Hockey great Wayne Gretzky was once asked why he was such a prolific scorer. Legend has it that his answer was, "I don't skate to where the puck is, I skate to where it's going to be."

There is some debate as to whether he actually said it, but it doesn’t matter, because the metaphor for the breakthrough intrapreneur is the most powerful one I know. The pursuit of breakthroughs is the art and science of using what you know now to anticipate where the customer and market are going to be later. Let’s briefly explore this metaphor:



Let me be clear: customer-driven means being customer-reactive; skating to where the puck is now. Why do we do this? Sadly, it is because it is defensible. It can be justified with conventional measures (“8 of 10 said they’d buy it!”).

Intrapreneurs are customer-inspired, not driven. They use customer insight as one of many critical cues. They extrapolate from the present to the future, using their “educated gut,” born of instinct and intuition based upon their knowledge of their industry. They don’t rely on a “6-gun gut,” an uninformed and undisciplined tendency to shoot from the hip.

In conclusion, there are two kinds of innovation that most companies strategically pursue: incremental and breakthrough. Each requires a totally different developmental process. Stage Gates works well for incrementalism. It’s about logic and resource allocation. It is about consensus decision-making driven down into the organization. It is critical for managing the “low-hanging fruit.”

Breakthrough intrpreneurship requires a different model of Dynamic Innovation that is about passion, a Gretzky mindset inspired by a rigorous understanding of market factors and a decision-making model built around the concept of Championed Teamwork that reports directly to sponsors who can make decisions to allocate resources without permission.

Both are required to compete in today’s and tomorrow’s competitive business environment.