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## The three horizons of stage-gated growth and innovation to future-proof the businesses

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### ABSTRACT

*The Three Horizons of Innovation model, known as the “gold standard” strategy framework by McKinsey brings growth and innovation together. It also helps organizations to manage the varying visions and guide their teams to know about the goals that are planned over time including what can they expect in terms of results or profits. The model is a great fit for portfolio management as the framework visualizes the company’s future and provides a common language to convey the innovation culture in a simple way. On the other hand, the Stage-Gate® model leads to faster and better innovation with its subset “Scrum” framed inside a structured innovation process benefitting the internal and external stakeholders. It helps to approach the new product development (NPD) with an accelerated model that is adaptive and flexible for managing products. The purpose of this review is to provide a constructive framework for the companies to respond based on market expectations. Furthermore, the paper critically presents several theoretical and practical implications linking the underlying business strategy. The details of this multi-characteristic approach are outlined in this article.*

**Keywords**— Growth; Innovation; Strategy; NPD; Horizon; Stage-Gate; Agile; Scrum; Ideation; Launch

### 1. INTRODUCTION

The organizations sustain growth in two ways – manage the current performance and maximize future opportunities for growth. When an organization’s innovation hits inertia, the growth declines. To have consistent growth, the organization must continue to concentrate on the existing businesses and consider the areas to enable growth in future.

The organizations can improve their innovation performance by tapping into customer needs and market-related knowledge ensuring the customers are involved at various phases from ideation to launch. This helps the organizations to obtain the needs of customers and evaluate the potential of new business ideas and manage existing businesses.

The development of products is now continuously deploying increments. These increments should have a reduction in cycle time and performance improvements which will assist the organizations to fulfill the strategic objectives set for the business. This lean approach has been promoted to not just nurture the innovation, but also gives a “market-fit” signal paving the way for two things – customer’s willingness will increase and prospect acquisition is possible in an economically viable method. Therefore, the business balances the factors of desirability (what customers want), feasibility (what is functionally possible) and viability (what is likely to become a sustainable business model). A successful balance of these factors will result in reduced market uncertainty and an increase in shorter release cycles enables a faster feedback loop to review the efforts. Hence, getting new products to market quickly is critical for gaining a competitive advantage in the battle for global markets.

The acceleration in technological development (commercialization) and improved mass communication (marketing mix) will drive organizations to focus on initial market performance because several environmental and market variables are beyond the control limit.

This article will highlight how innovativeness and commercial success play a vital role in the readiness of the business product. The proposed “matrix” framework is market-driven in the sense that the adoption rate is slower when the offering is “entirely new” and the driving forces to be used will establish a pioneering entry strategy and unique positioning to achieve customer

migration giving the market, a new dimension of compatibility by closing the gap between innovation and growth creating a positive impact on overall lifetime value (LTV).

## 2. THE INNOVATION AND GROWTH MODELS

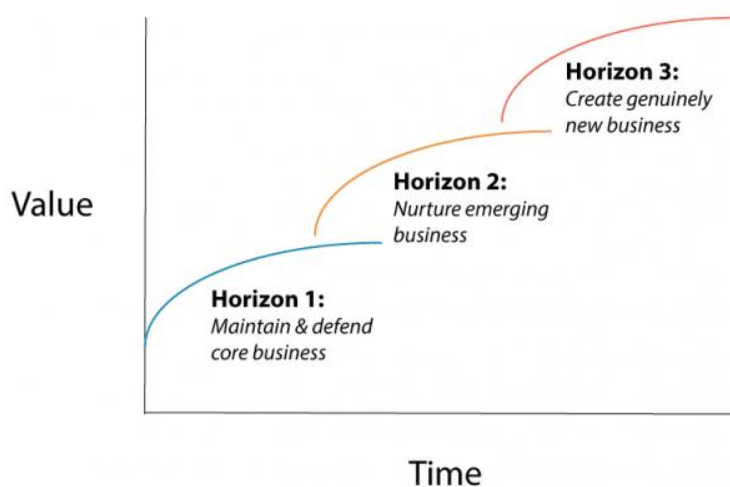
The basic rule of the business models is simple – creating and capturing economic value. Over the years, the basic rule is subject to rapid displacement, disruption or outright destruction (in extreme cases). But the pursuit of loyalty has become difficult in the digital world. Customers empowered by digital tools and extensive peer-reviewed knowledge about the offering now do a better job of choosing among buying options.

Like new entrants, the established organizations can also make the switch from loyalty to empowerment. The following section will highlight the two powerful models, where innovation depends on a company's ability to get more profitable ideas into its pipeline and how far the same has been incorporated in their offering.

### 2.1 Three Horizons Model of Innovation (The Alchemy of Growth)

This model provides a baseline for organizations to assess potential opportunities for better growth without ignoring the performance in the present. It talks about how to bring a transformation for an organization. The model (Fig-1) has two reference lines – time in the x-axis and what's dominant (ruling) or prevalent (preferred) in the y-axis. The model doesn't predict but aspires to the change that every organization looks out for and believes that it is possible to be achieved in the future.

The H1 or Horizon-1 is the business as usual (BAU) that is a more dominant way of doing things today in the business. The H1 is not fit for the future and it contains the seeds of its demise and it will decline over time. Let's take an example of a degenerative and divisive economy that is predominant today and is pushing humanity out of the market doughnut. H3 or Horizon-3 is the emerging future every business wants and the seeds of the expected future are visible today. The organizations carefully monitor this horizon to be the predominant way of doing things essentially replacing and improving upon the old H1. The H3 is an example of a regenerative and distributive economy that can bring humanity into the doughnut. The most important horizon is the H2 or Horizon-2, which brings the organizations into the arena of disruptive innovation where the disruption in this context can take many forms like a new concept, new technology or a new value-add or offering opening a new market value by disrupting the existing market value displacing the established companies or incumbents. These pointers are primarily based on market economics. Let's look at the strategy side of the model focusing on growth and innovation. The organizations will be categorizing the goals into three horizons.



**Fig-1: Three Horizons Model by McKinsey & Company**

The H1 is to keep up and protect the core business. This comprises activities or organizations that are most firmly associated with the organization. This implies a large portion of the revenue-making activity will sit on this horizon. The objectives in H1 will be for the most part around improving margins, bettering existing processes, and keeping cash coming in. The H1 hits the daily objectives related to sales, marketing, service and support. The H1 innovations are simpler to legitimize when it comes time for the team's yearly review. That is because tangible outcomes will be within sight. The investments that fall under the H1 are those that improve what the organization as of now has which incorporates incremental, little enhancements of the current product. These are finished by growing the client base bit by bit or improving the processes in place.

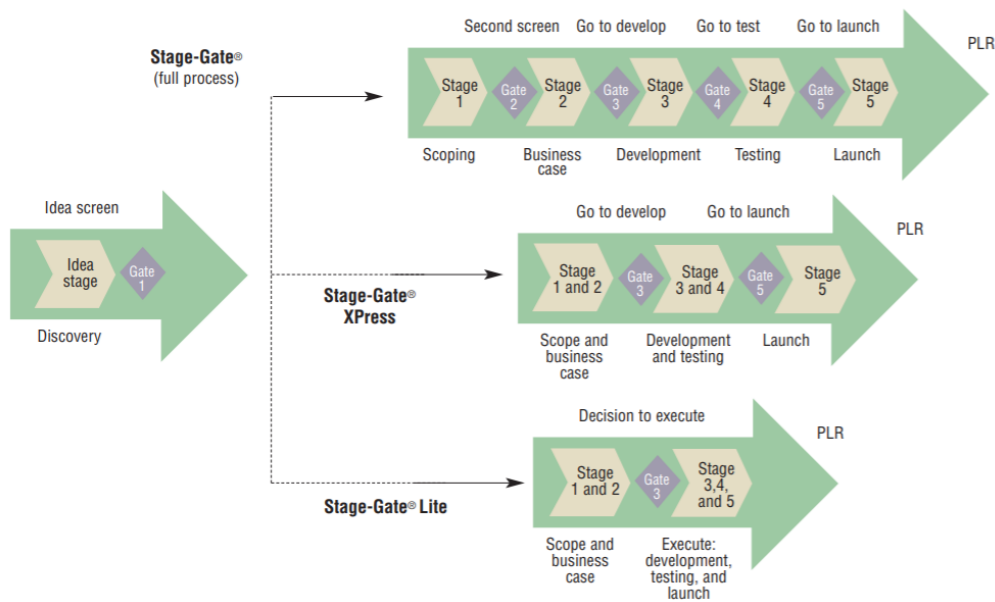
The H2 is to support emerging business which is talking what the organization as of now has and extending it to new spaces of revenue-driving activity. There might be some underlying expense related to the H2 activities and these investments ought to decently return. This depends on them being an expansion of the present and proven business plan. The H2 hits on new product offerings or growing the business geologically or into new business sectors. The H2 innovations take somewhat longer since they're ordinarily (yet not generally) those that have been replicated from adjacent business markets and applied to another specific context (which implies they turn out well at quarterly reviews). The innovations in H2 includes adapting with technology, processes, or revenue stream structures that as of now work well in different investments.

The H3 is to make new business by acquainting altogether new elements with the organization that don't exist today. The ideas in this horizon may go dubious and conceivably unbeneficial for a huge timeframe. This would incorporate research or exploration

projects, pilot programs, or entirely new revenue lines that require an upfront investment. They're typically connected with non-incremental innovations (disruptive, radical, or architectural innovations). Be that as it may, in actuality, the organization as a whole know incremental changes in certain substantial B2B businesses may just hit the market many years after the fact, and think about the compound effect theory of continuous incremental innovation. Furthermore, incremental investments can be disruptive. To utilize the horizon model to the organization's benefit, they need to consider in which horizon each project within the growth strategy fits. How long will it require to view the results? When can an organization hope to generate value (profit)? What is their anticipated ROI (return on innovation)? When the organization has mapped everything, share the forecasts and reasoning with the team. The horizon model assists the team with alignment, make everybody feel included, and get every key stakeholder of the organization in total agreement by making sure they have a clear understanding and relevant use of this model on the goal to be achieved. When people can see why long-term innovation takes time by understanding the horizon model, they'll be able to understand why those projects are worth the investment (and risk). This is a critical step the organization take towards enabling the teams to adopt an innovation mindset.

## 2.2 Stage-Gate® Model

The model assists with overseeing, coordinate and speed up the organization's innovation efforts. The Stage-Gate® model is a conceptual and operational guide for moving a new product project from idea to launch – a blueprint for dealing with the innovation process to improve adequacy and proficiency.



**Fig-2: NextGen Stage-Gate® Model by R.G. Cooper**

This model breaks the innovation process into a predetermined set of stages. Each stage characterizes a set of prescribed, cross-functional and parallel tasks to be embraced by the product team.

The model is a combination of multi-disciplinary and cross-functional abilities. It is structured around an empowered and cross-functional team. Each stage comprises sales, technical, marketing, operations and even financial tasks, requiring the dynamic involvement of people from all departments. The gates are cross-functional as well. The gates are staffed by gatekeepers from different departments in the organization who are the senior leaders who own the resources needed for the following stage. The parallel processing accelerates the model.

The tasks in each stage are undertaken simultaneously instead of sequentially, with much discussion between players and actions inside each stage. A solid market and voice of customer (VoC) orientation is a key feature of the model. The inputs for marketing begin at the discovery stage and remain a significant facet of every stage from beginning to end of the project. The projects cannot pass the gates until the marketing actions have been completed in a quality manner. And this extensive VoC emphasis often leads to the unique, superior product with a convincing value proposition is yet another key to success.

The project risk element is a vital factor in the specified model. While each gate in the model is intended to gather information to reduce key uncertainties and risks, the unknowns are driven down, so that the risk element is effectively managed. This model (Fig-2) can be scaled to suit different risk-level projects.

From very risky and complex developments to lower-risk extensions and modifications, the model is scalable to be fine-tuned by organizations. At first, when first implemented, it was a typical five gate model. The rule of the "one-size-fits-all" approach got to the bottom of the organizations and the management recognized that each of the projects, be it big or small has risk-level consuming resources and thus must be managed, however not all need to go through the full five-stage process.

The model has transformed into multiple versions to fit business needs and accelerate the projects. Stage-Gate® Full is for high-risk projects such as technology development and new solution projects. Stage-Gate XPress™ is for projects of moderate risks such as improvements, modifications and extensions. Stage-Gate Lite™ is for very small projects with a low-risk level such as simple customer requests. Stage-Gate® is a Relevant Model for Product Innovation and Growth. Why?



Stage-Gate® is a popular model used for product development and innovation. The following are the benefits of this model.

- It is a risk-mitigating model to break the investment decision-process into a series of stages and separated by Go/Kill decision gates. This gated and incremental commitment approach guarantees that poor projects are identified and killed early, thereby reducing the odds of proceeding to invest in a bad project.
- It is a simple decision model where gates depend on defined criteria and pre-specified deliverables. The designated gatekeepers (management) at gates, make go-forward decisions, prioritize and commit resources across ideas and development projects.
- It has a transparent process from idea to launch where everyone can see what the requirements are for good ideas and for projects to proceed by scorecards as well as who decides such as the gatekeepers.
- It has a comprehensive set of methods and tools developed for each stage and gate, by templates for idea illustration, concept description, business case, gauging scorecards, launch plan, how to demonstrate a gate-meeting, how to build in VoC and score ideas etc.
- It is a portfolio management system built in to manage the entire pipeline of ideas and projects. The portfolio management in Stage-Gate® is based on economic methods such as Net Present Value (NPV), Internal rate of Return (IRR), Productivity Index (PI) and qualitative methods (scorecards). Stage-Gate® provides gauging methods for ideas and projects with the tools to decide stop, go, hold or go back.
- It is a model with demonstrated results and prescribed best practices. Companies utilizing Stage-Gate® have more success in developing and launching new products than companies that do not use this model.

Stage-Gate® thus remains a highly relevant model for new product innovation and growth. The flow of the Stage-Gate® model is shown in Table-1.

**Table-1: Stage-Gate® Model Phases Walkthrough**

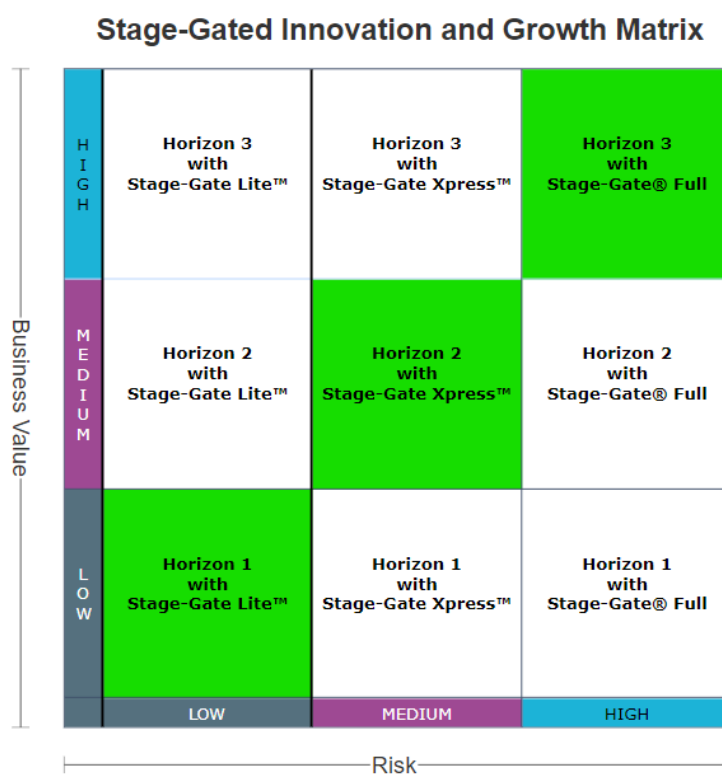
<b>Idea Stage (Discovery)</b> - Ideas are the feedstock or trigger to Stage-Gate, and they make or break the model. The need for great ideas coupled with high attrition rate of ideas means that the idea generation stage is pivotal. The organizations need great ideas and lots of them and they handle this as a formal stage in the model, often called 'discovery'. The key tasks include – fundamental technical research, brainstorming, design thinking or strategic planning exercises.
<b>Gate 1 (Idea Screen)</b> – This is the first decision to commit resources to the project: The “project” is born at this point. Gate 1 is very much a “gentle screen” and amounts to subjecting the proposed project to a handful of qualitative criteria such as: strategic alignment, project feasibility, magnitude of opportunity and market attractiveness, product advantage, ability to leverage the firm’s resources, and fit with company policies. If Go, the project moves into Stage 1, Scoping.
<b>Stage 1 (Scoping)</b> - This first and inexpensive homework stage has the objective of determining the project’s technical and marketplace merits. Stage 1 amounts to a quick scoping of the project, involving desk research or detective work – little or no primary research is done here. Stage 1 is often done in less than one calendar month’s elapsed time, and 5 to 20 person-days’ work effort. The key tasks include preliminary market assessment, preliminary technical assessment and preliminary business assessment
<b>Gate 2 (Second Screen)</b> - The project is now subjected to a second and somewhat more rigorous screen. Gate 2 is essentially a repeat of Gate 1. The project is re-evaluated in the light of the new information obtained in Stage 1. If Go at Gate 2, the project moves into a heavier spending stage. Besides the qualitative criteria used at Gate 1, the financial return is assessed at Gate 2, but only by a simple financial calculation (for example, payback period). Going into Stage 2, the “team” may expand and the project picks up momentum.
<b>Stage 2 (Build the Business Case)</b> - This is a “make or break” stage, where the Business Case is constructed and is a detailed investigation stage, which clearly defines the product and verifies attractiveness of the project prior to heavy spending. It is also the homework stage where the new product failures trace their roots, and is consistently cited as “weakly executed” in countless benchmarking studies. The key tasks include market analysis, voice-of-customer research, concept testing and detailed business (financial) analysis.
<b>Gate 3 (Go to Development)</b> - This is the final gate prior to the Development stage, the last point at which the project can be killed before entering heavy spending. Once past Gate 3, financial commitments can be substantial. Gate 3 also yields a “sign off” of the product and project definition. The evaluation involves a review of each task in Stage 2, and checking that quality of execution was sound, and the results were positive. Next, Gate 3 subjects the project should meet criteria used at Gate 2, with benefit of more solid data. The results of the financial analysis are an important part of this screen.
<b>Stage 3 (Development)</b> - Stage 3 witnesses the implementation of the development plan and the actual development of the product. For lengthy projects, numerous milestones and periodic project reviews are built into the development plan. Extensive in-house testing, alpha tests or lab testing usually occurs in this stage as well. The “deliverable” at the end of Stage 3 is an internally-tested prototype of the product really for beta tests, user tests or field trials. The key tasks in this stage are back and forth or iterative, with each development version – for example, protocept, rapid prototype, working model, first prototype, etc. taken to the customer for assessment and feedback.
<b>Gate 4 (Go to Testing)</b> - This post-development review is a check on the progress and the continued attractiveness of the product and project. Development work is reviewed and checked, ensuring that the work has been completed in a quality fashion, and that the developed product is indeed consistent with the original definition specified at Gate 3. This gate also revisits the project’s economics via a revised financial analysis based on new and more accurate data. The test or validation plans for the next stage are approved for immediate implementation, and the detailed market launch and operations plans are reviewed for probable future execution.
<b>Stage 4 (Testing)</b> - This stage tests and validates the entire viability of the project: the product itself, the production process, customer acceptance, and the economics of the project. It also begins the extensive external validation of the product and project. The key tasks in this stage include – in-house product tests, beta user or field trials, pilot production, simulated test market and revised business (financial) analysis.
<b>Gate 5 (Go to Launch)</b> - This final gate opens the door to full commercialization – market launch and full production or operations start up. It is the final point at which the project can still be killed. This gate focuses on the results of the tasks in the Testing and Validation Stage. Criteria for passing the gate focus largely on a “readiness check” that all is commercially ready; continued positive expected financial returns; and appropriateness of the launch and operations start up plans. The operations and market launch plans are reviewed and approved for implementation in Stage 5.
<b>Stage 5 (Launch)</b> - This final stage involves implementation of both the market launch plan and the production or operations plan. Given a well-thought-out plan of action and backed by appropriate resources and solid execution, and of course, barring any unforeseen events, it should be clear sailing for the new product and another new product success.
<b>Post Launch Review (PLR)</b> - At some point following commercialization (often 6 to 18 months), the new product project must be terminated. The team is disbanded, and the product becomes a “regular product” in the firm’s product line. This is also the point where the project and product’s performance are reviewed. The latest data on revenues, costs, expenditures, profits, and timing are compared to Gates 3 and 5 projections to gauge performance. Finally, a post audit – a critical assessment of the project’s strengths and weaknesses, what can be learned from this project, and how the next one can be done better – is carried out. This review marks the end of the project. Note that the project team and leader remain responsible for the success of the project through this post-launch period, right up to the point of the post-launch review.

### 3. THE STAGE-GATED INNOVATION AND GROWTH MATRIX

Most organizations want growth and also acknowledge that innovation is a crucial component of achieving that growth. Some of the organizations treat innovation as one-off events like a huge project to be delivered, or a set “innovation program” to be introduced. The reason for this approach is the perceived gap between the innovation of tomorrow versus the reality of running the business today. McKinsey's Three Horizons of Innovation and Growth aims to help the organizations bridge this intellectual gap. It does this by creating stepping stones between running the business profitably today and growing it for the future. This strategy model helps ensure that the organization consistently balance the focus between the needs of today (horizon 1), the future state of the business (horizon 3), and the steps that are needed to take to get there (horizon 2). The Three Horizons of Innovation and Growth model is an extremely versatile strategy framework, applicable to most organizations. The model imparts itself to organizations who've to relate that growth and innovation have been a staggering block. If the organization is mired in “chugging along” delivering business as usual, McKinsey's Three Horizons of Growth might just be the right strategic model for the organizations.

The recent experiences reveal that project-management methods can be applied in the innovation process and has a great capability to reduce development time and increase the success rate of new products. The product innovation process has traditionally been managed using a gated model with defined stages and gates or decisions points indicating Go/Kill. The processes defined in this model were developed to tackle the random, disorganized or chaotic approaches to new product development, once widespread in major firms (a challenge for small and medium-sized companies). Stage-Gate® is a widely-used model for product development and innovation and it is a relevant model too. The specific model discussed in this article has been designed for major new product projects. Here, a new product project is where technical development work is executed to a market need for delivering a new or improved product or service that is evidently different from previous products. The result can be a quintessential innovation, a remarkable product improvement, or entirely a line extension. All these types of new product projects are handled by the Stage-Gate approach (and its variants).

It is not just about the risk an organization tries to manage, but also the level of flexibility and adaptability to the market needs where the cost of delay must be weighed against the cost and probability of being wrong concerning the time and value it brings to the projects. This is where the Stage-Gate® model can reframe the three horizons across the two key measures – risk and time need to value the project. The following matrix (Fig-3) will help the organizations on the number of gates to use for each of the business horizons set.



**Fig-3: Stage-Gated Innovation and Growth Matrix**

A few companies have extended the use of the Stage-Gate approach where the concept of stages with defined tasks and resulting deliverables together with gates, defined gatekeepers, and visible Go/Kill criteria to a wide variety of investment decisions. Apart from new product projects, these other applications of Stage-Gate include new business developments (outside the current market and technological boundaries of the firm), alliance and partnership projects, new process developments (where the “deliverable” is a new or improved manufacturing process), fundamental research projects, platform developments and capital projects as well.

Stage-Gate® fosters a high-impact balanced innovation and growth culture. How?

- Innovation as a strategic business activity that creates real value and enabling dynamic selection of projects from a robust portfolio of choices
- Retention of organizational learning in a purpose-built innovation with right-sizing process rigor to project risk with the right speed and productivity enabling a steady flow of continuous innovation
- All functional capabilities are respected and integrated with a fact-based project and portfolio decision-making assistance

The “ideal” grid is the approach that every organization should be getting through to ensure the right product with the right investment is addressing the right market with managed risk levels. And, this is where the green boxes part of the matrix helps to understand the different type of Stage-Gate® models fitting the right business horizon to balance the doughnut economics as well the business strategy making the businesses in each of the horizons, a market-fit at all times.

#### 4. CONCLUSION

The Stage-Gated Innovation and Growth Matrix gives the third element to measure while time and value (profit) are the primary measures. The risk-level of projects to bring out new products or manage existing products will be a key differentiation for organizations to factor in the right number of stages enabling the required gates to qualify the final output on every release.

Looking at the three horizons model, it has an axis of time and an axis of value (sometimes labelled profit). The three horizons are simply 3 S-curves that occur one after the other, representing each innovation project. How long each horizon lasts will vary depending on whether the organization is in a slow- or fast-moving industry, but this version will still give an indication. In general, H1 lasts for 1 to 3 years, H2 lasts for 2 to 5 years and H3 lasts for 5 to 12 years. The importance of H3 to become the new H2 and the old H2 to grow the market also considers the resistance of H1 to not decline.

One important thing to note about the horizon model is that it doesn’t look at the type of innovation done. Product innovation is a critical capability for any organization. On the other side, Stage-Gate creates a belief that product innovation is a value creation process that begins with ideas and ends as a successfully launched product.

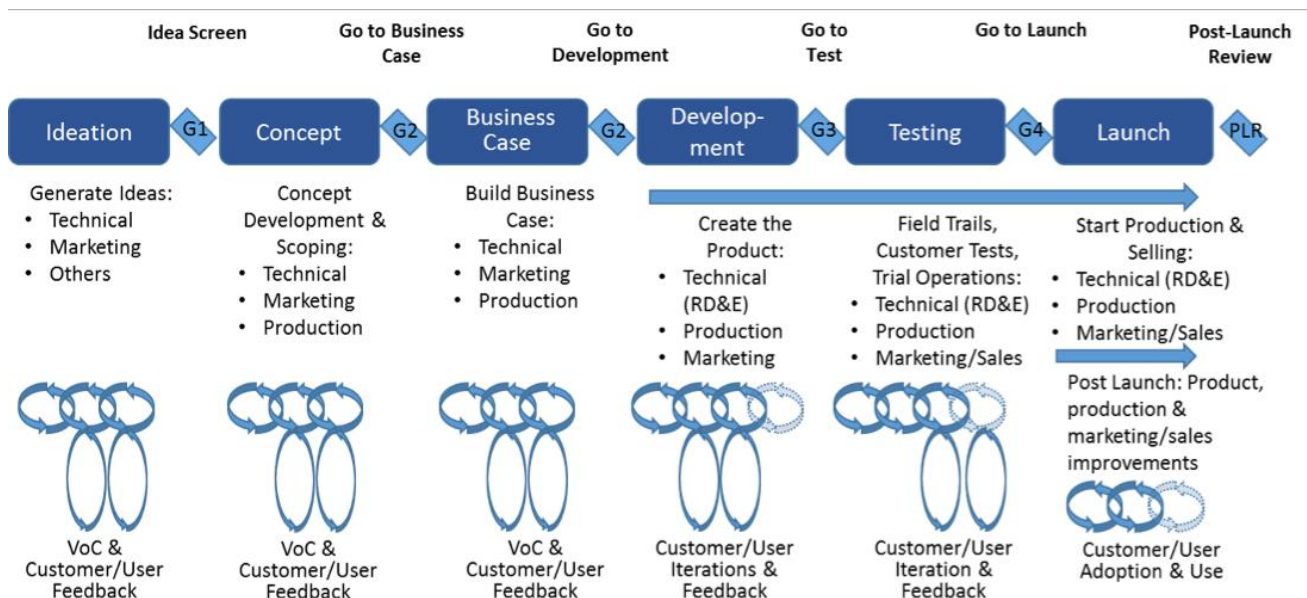
A new approach integrating principles from the Agile manifesto and methods from project management into the Stage-Gate model promises to tackle these challenges and looks to provide dramatic performance results. Why this hybrid model?

One, the Agile-Stage-Gate® hybrid approach provides a model to deal with uncertainties and ambiguity in the front-end, it also accelerates the process with the use of time-boxed iterations and focuses on the results through the development of substantial product increments as the measure of progress.

Two, the new method has major potential for increasing the success rates of new products. This model requires the project team to interact with users and customers, starting in the very early stages and helps to get valuable feedback & early market validation.

Three, Agile-Stage-Gate is not “rocket science”. The model is fairly straightforward to employ as a working method with part of the stages of Stage-Gate®. This new hybrid method can be used in all stages from Ideation (discovery) to Launch.

Agile-Stage-Gate® is used often during the technical stages such as Development and Testing. It also applies to the early or “fuzzy front end” stages of the innovation process such as Ideation (discovery), Concept Development, and Building the Business Case.



**Fig-4: Integrated Agile-Stage-Gate® Model**

The Agile project methods such as Scrum, when combined with Stage-Gate® (Fig-4) has the potential to faster product innovation. Agile-Stage-Gate® gets the product right through early and multiple customer validations. It deals with uncertainty and ambiguity regarding what the product solution might be. It also focuses project teams on one project, thus accelerating projects and creates stronger team morale. The examples of early adopters of this new model are appearing around the world where organizations successfully bring these two models together leading to a hybrid approach that delivers the best of each model to better innovation for both digital solutions, physical products and service products.



When Agile-Stage-Gate® integrates with the Three Horizons model, it will be the only innovation management and growth model to integrate all key stakeholders into value-adding accountability-specific roles successfully, that can be sustainably repeated and improved upon.

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## 6. DISCLAIMER

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