# SUSTAINING AND STRATEGIC INNOVATION DEFINITION AND COMPARISON

Inovo

The Case for New Terminology

There are many terms and definitions to describe the entities and actions that create value. We need a common language and definition of what we mean.

- **Disruptive**: the introduction of a product or service into an established industry that performs better. The introduction of a product or service into an established industry that performs better. applying new technology or processes to your company's current market.

- **Transformational**: The introduction of a technology that creates a new industry and transforms the way we live and work. Often eliminates existing industries or, at a minimum, totally transforms them.

- **Radical**: an invention that destroys or supplants an existing business model. The creation of new knowledge and the commercialization of completely novel ideas or products. Gives birth to new industries (or swallows existing ones) and involves creating revolutionary technology

- **Breakthrough** - an innovation from inside a company that pushes something to the next level. It is innovation that opens the company to new markets or changes the way customers interact with the market or the industry.

- **Horizon 3**: long-term innovation projects that generally produce results in 5-12 years. This typically is associated with non-incremental innovation (disruptive, radical, or architectural innovations, for instance).

- **Whitespace**: A quadrant of the Ansoff matrix that intersects New (to the company) Market and New (to the company) Product or Technology. Not necessarily new to the world.

Sustaining, Strategic and Speculative
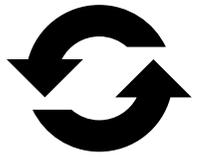
Sustaining
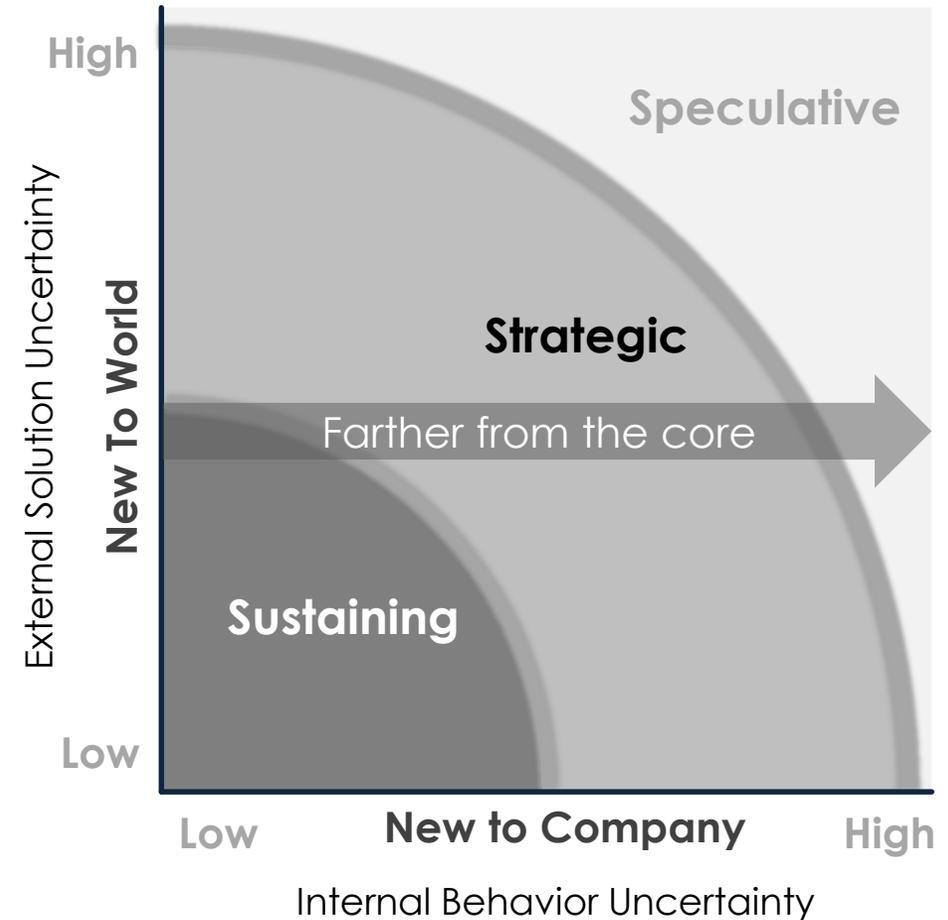is incremental and close to the core. It is necessary to stay competitive in the *short* term

Strategic
stretches the company's boundaries and has the potential to create new capabilities. It is necessary to stay competitive in the *long* term.

Speculative
takes high risk "moonshots" that could have vast potential. It is optional for companies with a high capacity for risk and a long-term vision

External Solution Uncertainty

New To World

High

Low

Speculative

Strategic

Farther from the core

Sustaining

Low — New to Company — High

Internal Behavior Uncertainty

Sustaining, Strategic and Speculative

These terms apply to:

- Innovation
  - Actions, activities, behaviors
  - 'We do strategic innovation', 'Our sustaining innovation process'
- Opportunity
  - What is created – becomes the offering
  - 'This opportunity is strategic', 'We have a lot of sustaining opportunities'
- System/Path
  - The framework, architecture, processes, methods and tools used to perform the activities to create the opportunity
  - 'Our sustaining path uses our NPD process', 'We have created a separate strategic path'

- The boundary between sustaining, strategic and speculative is fuzzy
  - Sustaining ≈ incremental
  - Strategic ≈ disruptive, radical, breakthrough …
  - Speculative ≈ moonshot
- Sustaining, Strategic and Speculative are distinct from
  - Distance from the core
  - Value creation potential
  - Time horizon

Avoid the confusion of using the term 'innovation' to mean both the action and the thing the action creates

Strategic Opportunity Axes

New to the World axis

How much an aspect of the world or industry will be changed by introducing the opportunity of interest. How unique is this opportunity in what it does, what new experiences it creates, etc.?

- **Technological/Design Novelty**
  - *How new and transformative is the technology and designs enabled?*

- **Market Disruption**
  - *How different is the market or segment from what currently exists?*

- **New Capability or Experience**
  - *What new types of experiences are introduced that change behaviors?*

- **Altered Value Network**
  - *How do company relationships change?*

- **Economic Transformation**
  - *What new means of deriving and partitioning value are being introduced?*

New to the Company axis

How much a company needs to change in a certain way given the opportunity of interest. How different is this opportunity from what they've done before? How well does it fit an existing business and business model?

- **Technology/Design Risk**
  - *How compatible with current technological and design experience?*

- **Market/Customer Novelty**
  - *What new markets, segments and customers are being targeted?*

- **Develop & Supply Chain Transformation**
  - *What new means of designing and producing are needed?*

- **Strategy & Customer Relationship Change**
  - *What new distribution and customer relationships are needed?*

- **Strategy & Business Stretch**
  - *What new strategic or business elements are needed?*

*A low score means little or no change takes place, and a high score means significant change takes place

Characteristics of a Strategic Opportunity

Great Size: It is potentially big – potential to approximate the size of the most successful existing businesses

Long-lived: It is long-term – will deliver value for a long time (not necessarily take a long time to create)

Requires Change: New capabilities, new collaborations and new decision-making

Uncertain Future : There are key uncertainties that require experimentation and new insights

Difficult Fit: It does not fit cleanly (or at all), into any existing business and may even cannibalize it

Organization Adaptation: It requires new organizational behaviors (e.g. a new business model and/or culture)
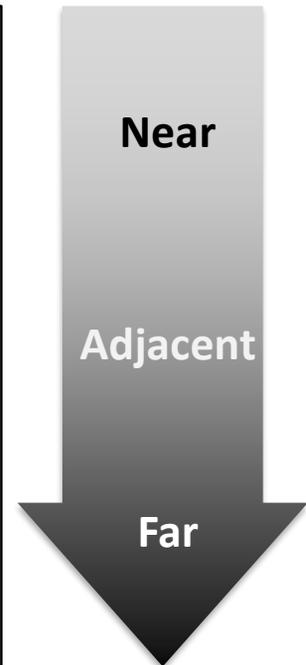
Uncertainty (not Risk) is the Key Factor

- Sustaining opportunities have little uncertainty (they may still be risky).
- Strategic opportunities have much higher levels of uncertainty
- Speculative opportunities have extreme levels of uncertainty

We don't know what is going to happen next, but *we do know what the distribution looks like*.

Risk

Sustaining Opportunities

Baseline growth
→ Risk dominates uncertainty

We don't know what is going to happen next, and *we do not know what the possible distribution looks like*.

Uncertainty

Strategic Opportunities

Accelerated growth
→ Uncertainty dominates risk

Pathways

The Problem – And A Solution

- Every company has a system for sustaining innovation, usually the company's New Product Development system

- Companies often do not distinguish between sustaining and strategic innovation and use the same system to address both types of opportunities.

- The processes, methods and tools used for sustaining opportunities aren't suited to dealing with uncertainty
  - They subject strategic opportunities to the control of NPD processes, the harsh glare of core-business metrics and existing business strategies.

- This problem requires a companyto develop a strategic innovation capability as part of their innovation system.

- It needs to have specially designed competencies, processes, methods and tools that are suited to the needs of strategic innovation.

- This cannot be done with refinements to an existing, even if highly effective, sustaining innovation system.

- Two types of opportunities –> two paths to follow
  - Sustaining path
  - Strategic path

Model Architecture
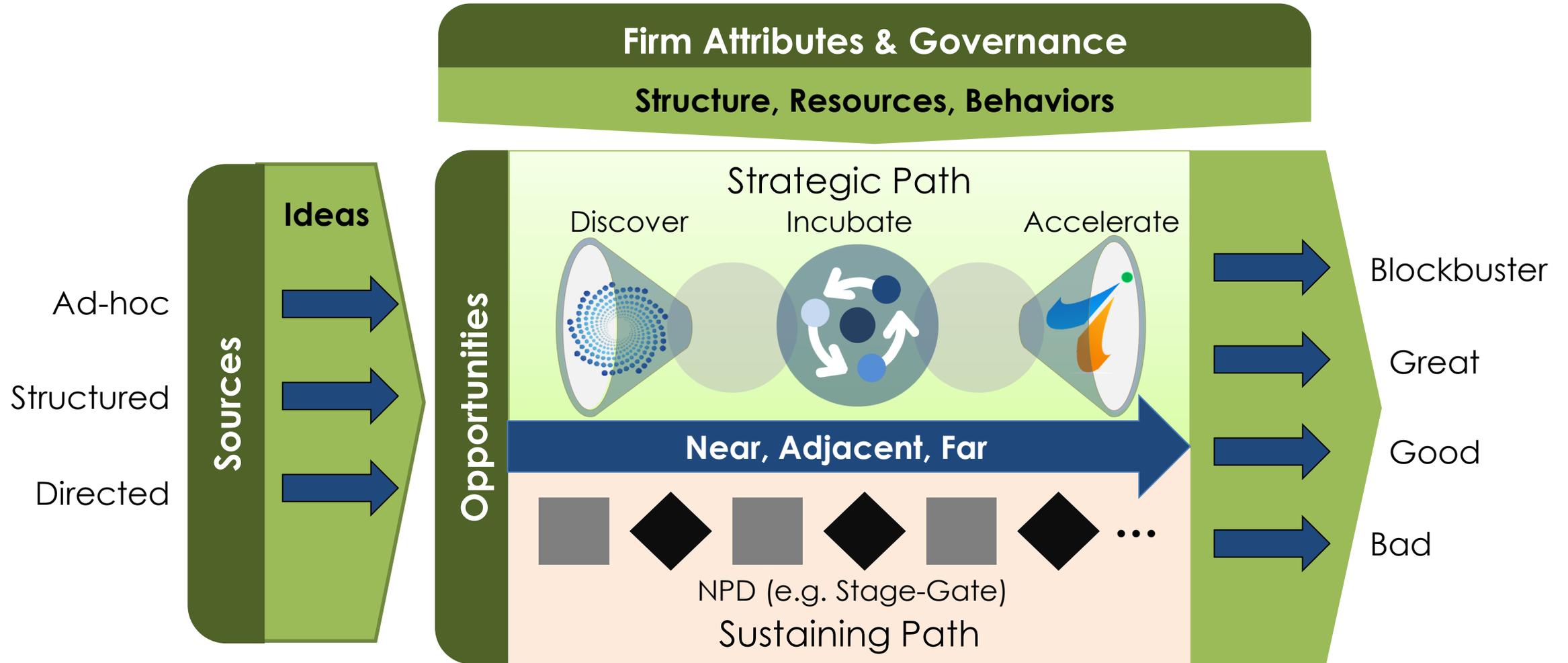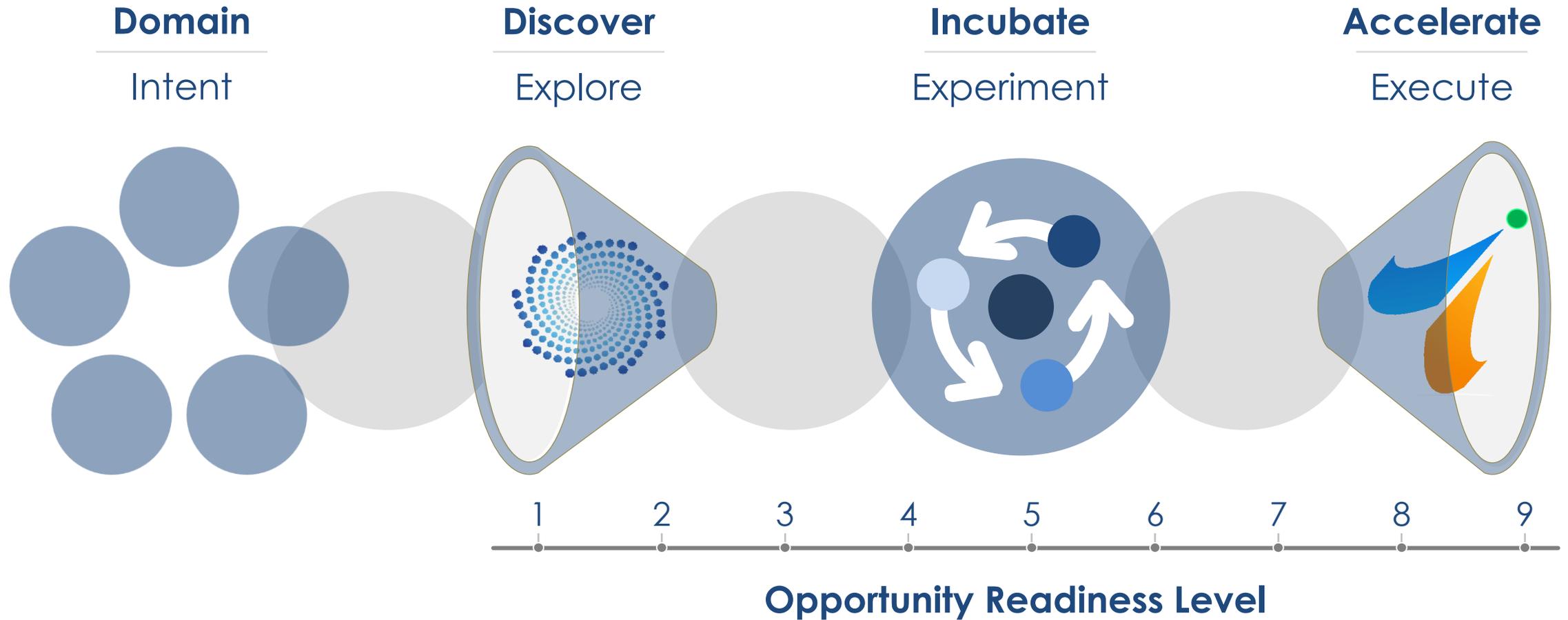
The Sustaining Path uses a Stage-Gate®* Architecture
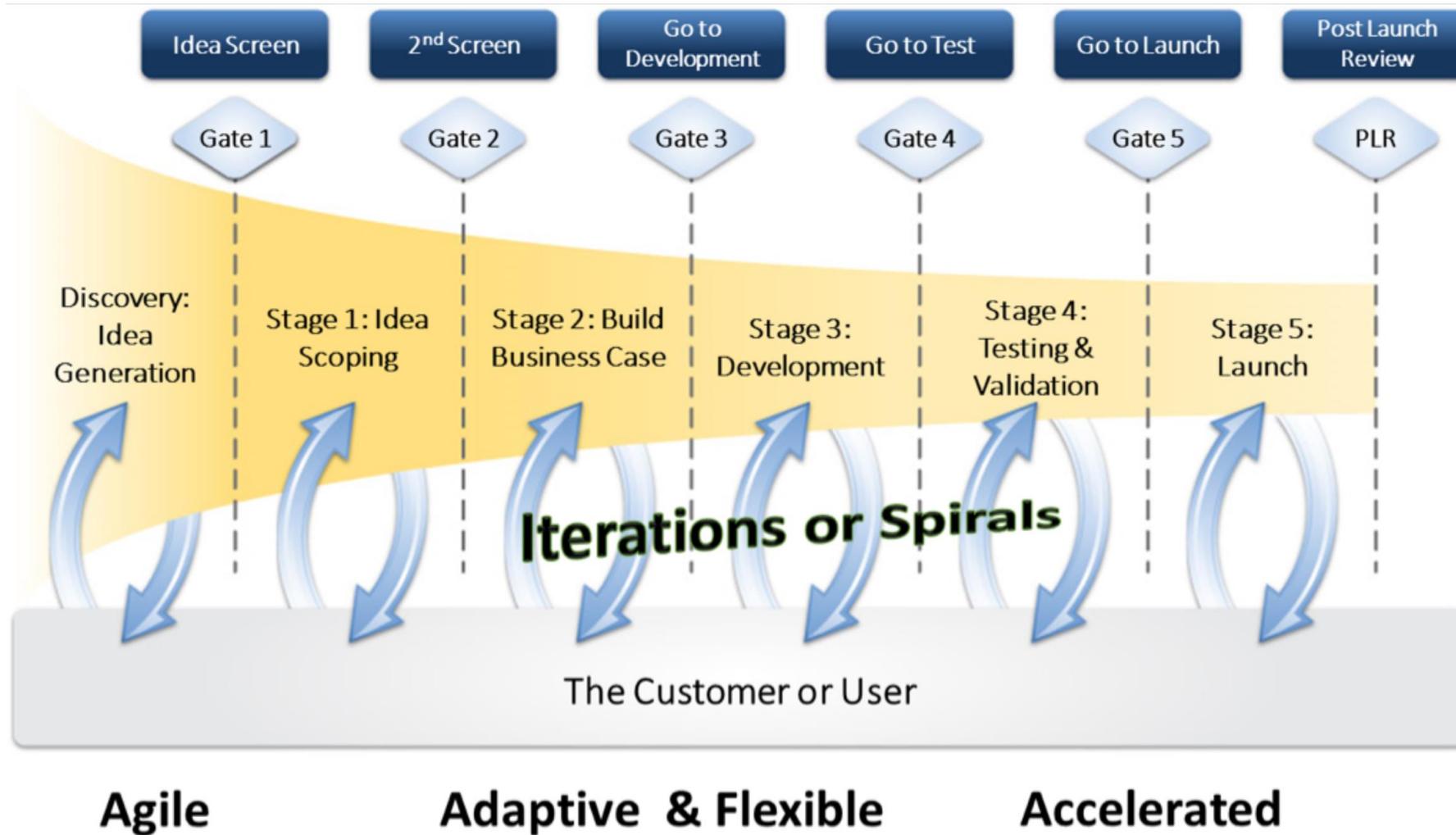
The Sustaining Path uses a Stage-Gate® Architecture

- This path can be implemented as a phase or Stage-Gate® process used by many companies for New Product Development (NPD).

- Companies that use these types of NPD processes have, over the years, developed variations that have helped them accommodate 'exceptions' that require additional learning and experimentation.
  - [Robert Cooper](#), the developer and promoter of Stage-Gate®, has proposed an '[agile](#)' version.

- These variations have not fundamentally changed the control and decision architecture and dynamics that underly sustaining innovation processes. It is still fundamentally deficient when it comes to strategic innovation

The Strategic Path uses a D-I-A* Architecture

Domain

Intent

Discover

Explore

Incubate

Experiment

Accelerate

Execute

1   2   3   4   5   6   7   8   9

Opportunity Readiness Level

*Grabbing Lightning

Gina O'Connor, Richard Leifer, Albert S. Paulson, Louis S. Peters, 2008

The Strategic Path uses a D-I-A Architecture

- The D-I-A path has built-in mechanisms to deal with the uncertainty inherent in strategic opportunities – experimentation, iteration, testing, pivoting.

- The process is characterized by competitive discovery, unbiased learning and decision making, ruthless competition between opportunities, intense focusing and shaping and iterative experimentation.

- Strategic opportunities, that have high error rates when put into the sustaining path, have much better outcomes when a strategic path is available.

Path Differences

Attribute	Sustaining Path	Strategic Path
Focus	Process centric, opportunity flows through stages	Opportunity centric, what opportunity needs
Orientation	Project oriented. Opportunity = project	Portfolio oriented. Multi-opportunity competition
Requirements	Requirements 'known' up-front	Requirements discovered during creation
Scope for Change	Specification and design refinement	Holistic shaping and redesign
Flow	Pre-determined sequence of action (control flow)	Action sequence based on situation (data flow)
Management	Waterfall project management (Gantt charts)	Agile project management (Scrums)
Learning	Specific, defined learning at each step	Broad, situational learning at each step
Routing	Looping back and iteration is difficult	Process loops and iteration built in
Exception Handling	Issues are exceptions and pulled out of flow	Exceptions are expected – part of the process
Transitions	Transitions are expected	Transitions are earned

Comments/Objections

#1 – Our company is doing very well. We have many innovations coming out of our pipeline. We are growing and our growth can be directly tied to our innovation efforts.

- Creating sustaining opportunities is necessary. The firm could not otherwise survive. Having a well-functioning sustaining path is critical for **baseline** growth.
- A sustaining only system does quite well – until you start to stretch your boundaries to encompass strategic opportunities. This is when the system needs to change.
- Adding a distinct strategic path to the system can double your growth – or more. It is much more effective than trying to shove all opportunities through a sustaining path.

#2 – We have (enhanced, upgraded, fixed, …) our new product development process (whatever sustaining innovation process we've been using) to do what is required (e.g., made it 'agile').

- The analogy is a 35-year-old software system that has been patched over and over again. While it works – sort of – it only does so with lots of attention and exception handling.
- There comes a time when a system needs to get reinvented and reimplemented from the ground up. Requirements have evolved way beyond what a patched-up NPD process can deliver.
- A new architecture for a 'next gen' innovation system is needed. One that accommodates both sustaining and strategic opportunities but in different ways that suit their different characters.

Conclusion

Strategic innovation is needed to seize strategic opportunities and fend off disruptive threats

Strategic innovation can take place at any distance from the core

Sustaining innovation, by definition, is always near the core.

Companies must constantly expand their core to keep up with the constant transformation of their ecosystem

Strategic innovation is the way to do this. Sustaining innovation doesn't cut it.
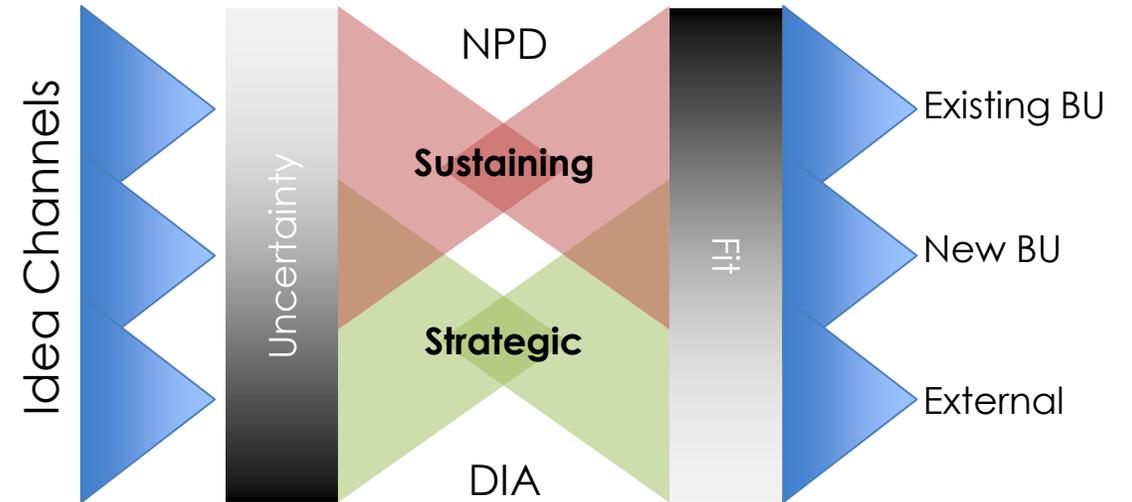
Readings

Beyond the Idea: How to Execute Innovation in Any Organization

Vijay Govindarajan and Chris Trimble

Beyond the Core

Chris Zook

Grabbing Lightning

Gina O'Connor, Richard Leifer, Albert S. Paulson, Louis S. Peters

Creative Construction

Gary Pisano

Strategic Innovation: If It Feels Comfortable, You're Not Doing it Right

Larry Schmitt