



Defining your innovation model

10 facets of innovation

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Introduction

From the outside looking in, it's apparent that Apple and Google are innovators. Both firms have demonstrated the ability to create interesting new products and services and have radically changed both their "home" market, as well as adjacent markets. It would seem that both firms have a defined innovation capability that enables them to innovate in a sustainable fashion. Digging a little deeper, however, we can find that while Apple and Google are both very innovative, they approach innovation from very different perspectives and deploy very different methodologies and concepts to achieve their innovation goals. Apple tends to innovate in small, centralized teams that are directed from the top down to certain goals and outcomes. Apple tends to place big bets on one or two innovations within a given time frame. Google, on the other hand, encourages broadly distributed and decentralized innovation based on what product managers and engineers think people want or need. Google may release as a "beta" application several solutions in the same week, many over the course of a year. Looking at just these two successful innovators demonstrates that there are several different approaches to innovation success, and demonstrates the importance of the expectations of the culture and the leadership commitment to innovation.

Looking at the success of Google, Apple, 3M, Gore, Michelin and other innovators can provide insights into the decisions a firm must make in order to establish a successful innovation capability, how those decisions are influenced by the corporate culture, and how the decisions impact that culture. We believe there are a number of different innovation models that are possible based on how a firm decides to structure its innovation capability in regards to a number of facets. When we speak of "facets" of innovation, we mean the strategic decisions that inform how innovation is done within a firm – what is expected and what is permissible. Some firms make active decisions about these facets, and some firms settle in to a specific innovation model without making explicit decisions. This article is meant to review many of these facets and identify three innovation models which are the result of decisions made based on corporate strategy and innovation facets.

Innovation Model Facets

Innovation facets refer to a short list of options that a team can select from when building its innovation capability. These facets or options are not static; they can change and morph over time. We believe, however, that active, explicit decision making when the innovation capabilities are built and reviewed will enable the team to consider the full range of possibilities about its innovation model and the likely success of the model and the organization over time. Let's look at these "facets".

The first three facets have to do with strategic intent and structure.

1. Should the innovation team receive ideas from internal sources, external sources or both? Most firms are comfortable requesting and receiving ideas from employees. Adding external sources

such as customers and business partners in addition to internal sources is typically called “Open Innovation”.

2. Should the innovation team operate as a small, secretive group removed from the rest of the organization (a skunk works) or should innovation be broadly participative across the organization, or both?
3. Should innovation be managed centrally or should the capability be decentralized and sponsored throughout the organization? This issue addresses which teams or functions are responsible and accountable for innovation, and the nature of the ideas generated.

Note that our two examples – Apple and Google – were chosen with a purpose. Apple’s innovation approach represents primarily a closed, small team that is managed centrally, while Google’s approach is much more open, broadly participative and decentralized. Both are successful yet both firms have made very different decisions about how to organize innovation.

Beyond the facets or options having to do with strategic intent or structure, there are decisions that must be made about how innovative teams will operate and their scope:

4. Will innovation be managed as a suggestive model or a directed model? In other words, can anyone submit any idea about any issue or topic, or is the innovation directed from the top down about strategic topics using idea campaigns or framed challenges?
5. Should innovation address incremental change, disruptive change, or both?
6. Should innovation focus on new products, new services, new operational models, new business models, new strategic/management models, all of the above or only some of the above?
7. Is innovation a “project” with a discrete beginning and end, or a sustaining capability?

Again, using Apple and Google as examples we can see that while both are very successful innovators, they have very different opinions about these facets or criteria. Apple tends to use a directed model to focus on disruptive change, primarily in discrete projects. Google, on the other hand, uses a more suggestive model informed by the company strategy to develop incremental and disruptive products in a more sustaining way.

The final facets have to do with the structure and process of innovation.

8. Are ideas sponsored and worked in a team environment or mainly by a single individual?
9. How are the innovators compensated and recognized?
10. How are the ideas evaluated – by a cross-functional team with established criteria or through a “wisdom of crowds” approach

In Google's case, many ideas are formed and worked by an individual who seeks to attract others to his or her idea and grow a team over time. However that individual can work an idea for quite a long time in isolation. The rationale for this approach can be attributed in part to the fact that Google has traditionally provided large awards for good ideas, which reduces collaboration and reinforces small teams. Apple, on the other hand, seems to develop innovation teams from the outset and charter them with a specific opportunity or market space, and places less emphasis on rewards and more on recognition of the innovators. Both Google and Apple use cross-functional teams with criteria to evaluate ideas, although Google does have the advantage of releasing products in "beta" to receive broad feedback from its user base very quickly, so it does practice a version of "wisdom of crowds" evaluation.

Using Google and Apple as counterpoint examples, we can see that each firm made conscious or unconscious decisions about a number of facets or options that enable the innovation model in their organization. These decisions impact how successful their innovation initiatives are, how pervasive innovation is within the organization, the breadth of ideas and how those ideas are sponsored and transitioned into new products and services. While both firms are very different, they both made decisions about these facets that formed the innovation programs that are in place today. Likewise, as your organization makes a decision about creating an innovation capability, your innovation sponsors and executive teams need to make active decisions about these facets and how they will impact your innovation outcomes and goals. Too often innovation is reduced to a small, discrete project meant to generate a safe set of ideas for the next version of a product, which dramatically limits the innovation team's degrees of freedom to explore new opportunities.

As we've defined it, there are at least ten facets of innovation that your team must consider when defining an innovation program. Choosing to ignore one of these facets simply means your team is foregoing opportunity and defining innovation more narrowly than is helpful or even necessary. While it may be challenging to consider all of these facets at the beginning of your innovation journey, none represent an "either-or" proposition. Most of these facets actually represent the ends of a spectrum and do not have to represent hard trade-offs or mutually exclusive choices. For example, an organization can have a combination of a suggestive innovation model, allowing anyone to suggest and record an idea about any topic, and at the same time promote a directed innovation model, where the innovation team or management team selects important topics or opportunities to drive ideation.

Often these facets are not well understood by the innovation sponsors or champions, and are narrowly defined to avoid thinking through a more complex solution. While this approach simplifies the initial development, if these concepts are not revisited the team can "codify" an approach which ignores many innovation opportunities and unintentionally short-changes itself by eliminating vast innovation opportunities. For example, many innovation teams initially determine that all ideas should be generated and submitted by people within the company and no ideas will be sourced from external partners. While this may be a good choice as the initiative is started, it eliminates a significant

opportunity for more ideas as the model matures if the team does not reconsider its idea sources and options. Many Fortune 500 firms are implementing some version of an open innovation model. To ignore ideas from these sources is to eliminate a significant source of new ideas.

Let's review each facet in more detail, and then look at a couple of innovation models that reflect decisions about these facets.

“Open” versus “Closed” innovation

There are a number of competing theories about where ideas should “come from”. Traditionally, many organizations followed the model that innovation should be driven from within – that is, ideas should come from individuals within the boundaries of the corporation. Henry Chesbrough in his book *Open Innovation* introduced the concept of sourcing ideas from customers and external partners, and firms like P&G have recognized that there are significant opportunities in opening up to ideas from outside the four walls of the organization. In 2005 P&G set a goal that at least 50% of its new product ideas should originate outside of P&G. That’s a dramatic statement from a firm that has been very successful innovating internally, but recognizes the wealth of ideas and insights that exist outside of P&G.

So, as with many of these facets, the answer is that firms should plan to generate ideas internally, and should source ideas from external firms – customers, partners, channels and other interested parties. What becomes more interesting and challenging is that the more your innovation program relies on external ideas, the more you’ll need to invest in a careful review of the ideas submitted from outside due to intellectual property concerns. We advocate starting out with a focus on generating ideas internally and building the processes and competencies to manage ideas, and then turn to outside sources.

We at OVO advocate developing a process to generate and manage ideas. Developing this capability and maturing this model for internal ideas will assist your organization when (or if) you decide to accept external ideas, since many of the processes, evaluations and metrics will be the same. What will be different as you accept external ideas will be the amount of scrutiny the external ideas must endure to demonstrate that the submitter has rights to the intellectual property and that the idea does not infringe on existing products or services. Once the external ideas clear these hurdles, then they should be considered in much the same way as ideas that were generated internally.

Open innovation provides a means to gain ideas from a much broader base of individuals who have an “outside-in” perspective of your company, and who may have a different understanding of your strengths, weaknesses and market capabilities than your internal teams. Ideas originating from your customers and business partners may identify gaps or undermet needs that your internal teams were ignoring or unable to identify. Once you’ve decided to open up to ideas from the outside, you’ll need to determine which route to follow:

- Writing requests for proposals or contests. Several firms exist which will develop an RFP or a contest and publish the opportunity or challenge and allow anyone to respond. Often the respondents don’t know who the ideas are intended for, as the third party writing the challenge or RFP aggregates the results and submits them to the requesting firm. NineSigma and Innocentive are two firms that participate in this space.
- Proprietary networks. Several consulting firms are helping clients construct open innovation in proprietary networks. This entails defining a small, trusted set of partners who can understand and solve specific issues, so more information can be shared. Rather than expose a need or

challenge to a broad community, a proprietary network exposes a challenge to a pre-screened network of firms who should be able to respond quickly and accurately. Venture2 and other consulting firms help clients build proprietary networks

- Open innovation. Some firms will allow anyone to submit an idea. These processes in some cases are little more than a public suggestion box.

Mike Docherty from Venture2 has a very nice review of a range of “open innovation” approaches, including the methods identified above as well as several others. You can find that white paper at his website (www.venture2.net).

For most firms that are just beginning to build an innovation capability, we recommend developing the internal skills and management processes to generate and evaluate ideas before opening the door to “open” innovation. Once your internal capabilities are mature and repeatable, it will be easier to accept and manage ideas from external parties.

“Skunk works” versus broadly participative

This facet has to do with the number of people who participate within your firm on innovation. Depending on your goals and the types of ideas you hope to generate, the approach can vary widely. There are three main considerations to take into account:

1. How disruptive the innovations need to be
2. How much “engagement” and participation across the employee base matters
3. How difficult buy in will be within the main organization

Broad, participative innovation is valuable because it demonstrates that the organization has a capability in place to capture the great ideas generated by employees. This has a positive add-on effect – employees feel more involved and engaged, and gain greater buy-in as their ideas are considered and implemented. If employee engagement is important to your firm, broad participation in the innovation program is valuable. However, there is a tradeoff. Most broadly participative programs (suggestion boxes, idea campaigns) are good for incremental or breakthrough innovation, but rarely produce disruptive innovations. There are several reasons for this, but suffice it to say that a large group of people usually find it difficult to remove their preconceived notions about the business and think about the business or opportunity in very different ways. Large groups almost inevitably revert to the mean. This is NOT to say that brainstorming, open suggestion boxes and idea campaigns won’t generate disruptive ideas. Typically, these programs generate a preponderance of incremental ideas. If done properly, they can also lead to breakthrough and game-changing innovations as well.

If your team is less focused on broad participation and engagement, or simply desires to generate more disruptive ideas, then a smaller, focused team is more effective. Many firms turn to a “skunk works” to give a team permission to think like outsiders or disrupters. Lockheed, Apple and many other firms turn to skunk works when the existing overhead, culture and infrastructure limit thinking and restrict the team. A concern with a small disruptive team or a skunk works is that the organization as a whole may believe it was bypassed and left out of the thinking, and may therefore slower to adopt or recognize the ideas of the innovation team. Additionally, a small focused team can be subject to strong biases and may ignore or not recognize information or market opportunities.

Again, this selection is not an either/or proposition. Most organizations need consistent incremental ideas to continue to enhance existing products and services, and want disruptive ideas to steal a march on competitors. Broad, participative innovation at the incremental level is faster and easier to deploy than disruptive thinking and can fill short term voids, while a disruptive team can take much longer to get up to speed, but is much more likely to identify long term, larger opportunities. It’s not at all usual to find organizations with well defined idea campaigns and broad participation that also have smaller skunkworks or disruptive teams at work on specific issues.

We generally recommend to our clients that they create a broad, participative program of idea campaigns and start their innovation program with these campaigns, since they are easy to develop and deploy and involve a broad group of people in the organization, leading to greater engagement and involvement. Meanwhile, if disruptive ideas are desired, the innovation team can designate and train a smaller group to focus specifically on longer term, more disruptive ideas.

Suggestive versus directed

Many organizations start their initiatives with a suggestion box. Anyone in the organization with any idea about any topic can submit their idea. This is a double edged sword, since the organization benefits when allowing anyone to submit ideas, but there is a significant cost to collecting and managing ideas that span a tremendous spectrum of opinion. Since anyone can submit any idea about any topic, the individuals and teams evaluating ideas are pulled from topic to topic, considering very short term, incremental product ideas one day and dramatic, industry disrupting service ideas the next day. The lack of structure in the idea submission makes it very hard for the evaluators to do justice to ideas, and places the emphasis on context and importance in the hands of the idea submitter.

Many firms turn to idea campaigns and directed ideation to address these issues and ensure the ideas that are submitted are in line with strategic goals and direction. In addition to a suggestion box, an idea campaign drives the idea submitters to consider an important topic or challenge or opportunity, and to generate ideas to resolve that issue. In this manner there is still broad participation, but the ideation is focused on a specific target that aligns to a business need or opportunity. The innovation teams are directing ideation and placing the ideation in a context that is important to the business.

Directed ideation usually results in fewer ideas over time than a suggestion box, but more of those ideas align to business needs and those ideas have a much greater likelihood of addressing a strategic problem or challenge. Therefore, many more ideas from a directed session are selected and implemented, and a significant number of people within the firm have a chance to participate. Additionally, with directed ideation the depth and breadth of the firm can focus on specific issues that are important to the company and the management team in very short order. This focused, directed ideation creates tremendous value.

We advocate a combination of open suggestion box and focused ideation or idea campaigns. Your firm will benefit from ideas that individuals may submit that don't align to the corporate strategy. These ideas will typically originate in an open suggestion model. To improve the results from an open suggestion box, we recommend asking the submitter to communicate the challenge or need the idea addresses and the potential benefit, to simplify the lives of the evaluation team. Make sure submitters are clear as to the evaluation process so they can submit as much information as possible to help the evaluation team. At a minimum, they should be able to identify what outcome their idea significantly helps customers achieve. They should identify or provide information to identify the next action step the organization can take to get to the ultimate answer of who will buy the innovation and why. In this manner anyone can submit ideas but must provide more information and context. Meanwhile the innovation teams can identify key issues or opportunities and sponsor idea campaigns or directed ideation around topics of interest that align to corporate strategy.

Incremental versus disruptive

Let's face it – very few teams start an innovation initiative to generate incremental ideas. The consistent goal is “disruptive” change to existing markets, channels or products. However, the challenges to disruptive innovation are rather significant, and the timeframes and risks associated with disruptive or radical innovation are often too much to bear for a firm just starting an innovation initiative. While some innovators look down on “incremental” innovation, that's where many firms just starting out cut their teeth and gain the skills and credibility necessary to move on to disruptive innovation.

The incremental/disruptive spectrum has a lot to do with the expectations of the management team, the culture of the organization and the challenges the firm faces from competitors, the market and its customers. Every firm has intentions to be a market leader and to stay on top by beating competitors to provide new products and services or open new markets. However, most firms don't have the ability to innovate consistently and lack the tolerance for change and risk that disruptive innovation requires. So the result is that many firms start their innovation programs focused on incremental innovation.

What the management team expects and is willing to tolerate matters quite a bit in this spectrum. A management team that is comfortable with the status quo and does not want to introduce a significant amount of risk and change will almost certainly adopt an incremental approach, and even management teams that desire the change and disruption of radical innovation need to build their innovation capabilities by deploying and demonstrating incremental innovation skills before moving to a disruptive model. There's a psychological barrier to disruptive innovation in most organizations, since the people involved can see many simple techniques to solving small problems (incremental innovation) that are being left on the table when they are asked to develop disruptive ideas. Until those simple issues have been addressed, removed as a consideration, or simply acknowledged as issues that will be addressed eventually, it is very hard for a new team to focus immediately on disruptive ideas.

As you may have guessed, we recommend starting out with the development of an incremental innovation initiative, building out some of the processes and maturing the culture to prepare for a more disruptive innovation program or campaign. This provides early successes critical to getting buy in for the team and the process throughout the rest of the organization. These programs can run in parallel with an overlapping set of participants. Recognize that it will take longer to develop a team and expose them to the set of disruptive tools and techniques than it will to generate incremental ideas. However, once the disruptive team is up to speed, they'll have the means to generate truly disruptive ideas and spot new opportunities.

Centralized versus Decentralized

In any organization, innovation can take place in a number of “locations”. These locations could be:

- Within one individual’s mind
- Within one product group or line of business
- Across two or more product groups or lines of business
- In a geography
- In a business function
- In the organization’s “white space” – between competencies or outside existing competencies
- With a specific business partner – co-development or co-innovation
- Truly “open” innovation – attracting and receiving ideas from a wide range of partners

At any time, innovation programs can be run in one or several of these “locations”. While innovation should be sponsored and managed close to the need and the customer, there are benefits to creating a centralized methodology and approach for innovation, so that each group or location does not create its own process, tools, methods, language, evaluation criteria and tools. Developing a common approach to innovation and applying it broadly often makes a lot of sense, just as having a common purchasing process benefits everyone.

Additionally, a centralized approach to innovation can drive a significant amount of value. There are many tasks within an innovation program or capability that are more effectively accomplished in a centralized role. These tasks can include trend spotting, management and analysis, idea facilitation, sponsorship and coaching, developing a common innovation process, managing third party innovation partners, and innovation training. A central team that is free of the product group and quarterly pressures is also much more likely to generate and adopt longer term, disruptive ideas, since they are not measured on a quarterly results (P&L) basis. Since they have permission to work in longer time horizons, they can take on tasks that a product group, line of business or geography may have difficulty justifying given the extreme focus on results and quarterly reporting. The central team can also provide a home for an idea that spans two or more groups. Such ideas, which are often terrific opportunities, often die because no one owns them; the central group provides that home. This alone provides great value to the organization.

So, the challenge in any large, distributed firm is to determine what roles and tasks (if any) should be centralized and which roles and tasks should be distributed and decentralized. Clearly, we desire ideas from anyone, and want ideas generated and evaluated by those close to the customer. In this regard, ideas that “bubble up” from product teams or others in the organization should be worked as close to the customer and the originator as possible, especially if they don’t impact other teams or processes. However, as ideas are generated that impact multiple lines of business or product groups, or have a much longer time horizon or higher risk profile, the idea may need to be considered in a central team to

help manage any issues or disputes. Additionally, while innovation tasks and activities can happen in a distributed fashion, as much as possible the organization should require the use of one process, one language, one set of tools and methods, so that ideas can be easily transmitted across the business and easily compared with ideas generated in other business units or geographies.

Product/Service/Operations/Business Model

Another item for consideration is what kinds of ideas should be generated. In a product firm, innovation is usually thought of as a method to create ideas around new products. However, there are significant opportunities to innovate the services around the product, its marketing channels, even the existing business model. Two good examples of business model innovation are Dell and York. Dell makes PC compatible machines similar in function and capability to Compaq, but dramatically changed how the machines were funded and distributed. York makes HVAC equipment, but recently began offering a program to its customers to sell “chilled air” in units rather than large HVAC equipment. This dramatically changes the dynamic for York, for its customers, and for its competitors.

Too often a firm is very willing to innovate around what it considers its strengths (service companies generating services ideas) but is reluctant to innovate around the other attributes. Many product centric firms have a hard time generating ideas that are not product related, yet there are many opportunities to provide innovation around an existing product – even a commodity product – based on a service or business model. The reason for the difficulty lies in the definition of innovation and value within the business, and the “inside-out” nature of our understanding of the market. Many firms define the value they provide to customers as products or services rather than providing a way for a customer to get something important done with greater satisfaction.

Within many businesses, the teams that deliver the products or services are experts at what is built and delivered, but have less understanding about what customers and channels want. So, while a product firm creates dramatic increases in a product, its customers may be unhappy because of the channels they must use to acquire the product or the services offered around the product. These issues are not understood by the product teams and are often discounted internally, when in fact in many cases the opportunity for dramatic innovation in an industry is not within the core competencies of the industry, but around the periphery. Consider the MP-3 player as an example. By the time Apple entered the market with its iPod, many hardware firms were giving away MP-3 players in cell phones and as add ons to other products. The MP-3 player was becoming commoditized quickly – there was not a lot of innovation left in the physical product. Apple’s true innovation was in the service and community it built around iTunes, which disrupted not only the MP-3 market, but the music distribution business as well. It wasn’t the iTunes format or interface—or for that matter anything technical about the product/service at all—it was the strategic innovation of getting all the music labels to agree to sell songs on iTunes, which provided value to customers who wanted to legally buy, store, and organize music easily in one place.

Your team needs to identify which innovations are desired and can be successfully implemented. If your organization is product-centric, it should innovate around its products, but should carefully consider service innovation and business model innovation. Starting out with a focus on product innovation and gaining the skills to consider service and business model innovation is a good approach. Be careful not

to shut the door to ideas that aren't related to products from the start or you will establish a barrier for ideas that are not product related and have difficulty generating ideas that are not related to products over time.

Recognition and Compensation

As your innovation program gets underway, you'll need to consider how to recognize and reward people who take an active role in innovation efforts. Since innovation is new and risky, more emphasis needs to be placed on recognition and rewards for individuals than may be the case in other initiatives. Additionally, the methods you use to recognize and reward idea contributors and innovation participants will to so degree dictate the shape and structure of your innovation model.

On one hand your firm can structure the innovation program as a contest – the “best” ideas are awarded a large prize, which can be cash or physical goods. On the other end of the spectrum, some firms provide softer but still very important recognition – peer recognition, new titles for active innovators and more time to innovate. Both approaches are valid, as is a combination of the two. However, the methods you choose can impact the amount of collaboration and evaluation of the ideas in your innovation program. Too much emphasis on individual rewards, especially large cash awards, will discourage collaboration, as individuals become concerned with the size of the award they can win. In these cases the collaboration on ideas falls dramatically, since the incentive for collaboration is lower than the incentive for personal reward. Another concern with high individual reward structures is that these rewards can create perverse incentives – while the generation of ideas is important, we want to encourage good, well-conceived ideas, not just a tsunami of ideas so that some individuals can win a prize for entering the most ideas.

Another concept for consideration is the impact of the recognition or reward on the idea submitter. Research has demonstrated that most really innovative people prefer rewards and recognition to be focused on peer recognition and the opportunity to work more closely on innovation, over cash or prizes. In fact, in some instances a large cash prize can be seen as a disincentive for some innovators. A careful balance is necessary, to encourage the right behaviors and incent people to participate actively in the innovation process.

The “best” innovation recognition and rewards program combines incentives for activity in the innovation program – measures for submitting ideas but also for active participation within the program, along with peer recognition. Your team needs to understand as well that the incentives, rewards and recognition programs you put in place will impact the working of the team, the innovation culture and the ability of the teams to collaborate and share ideas. If your team seeks active collaboration on ideas but places high cash rewards for the “best” ideas, then the incentives will encourage hoarding of ideas and discourage collaboration and interaction.

Wisdom of crowds versus defined criteria and “experts”

As ideas are generated through idea campaigns or closed skunk works, they must be evaluated to determine their cost, likely impact and opportunity for success. There are a number of methods to use to rank and evaluate ideas, ranging from a social networking phenomenon called “wisdom of the crowds” to a more traditional established criteria and cross-functional evaluation team.

Wisdom of the crowds is a concept based on empirical evidence that large groups can, in the right circumstances, identify good ideas. James Surowiecki wrote about this concept in his book entitled *The Wisdom of Crowds*. In the book he identified four characteristics of a crowd that can lead to good evaluation and decision making:

1. Diversity of opinion – the crowd must have a strong diversity of opinion and perspective
2. Independence – individuals in the crowd must not be overly influenced by their peers
3. Decentralization – people bring specialized knowledge to the discussion
4. Aggregation – a method exists to turn private judgment into a public decision

Many firms are intrigued by the possibilities of gathering ideas from a broad population of consumers using innovation solutions similar to Dell’s IdeaStorm approach. In this approach, anyone, anywhere can submit ideas and vote on the “best” ideas. As Dell has discovered, there are several problems with this approach, most importantly, the sheer number of ideas and the tools and processes necessary to evaluate and decide which ideas should move forward. Dell’s IdeaStorm team has recently been investigating “idea management systems” that will help manage the ideas and establish a process internally. An additional concern about “wisdom of crowds” is that your competitors are listening and interacting with the same “crowds” that you are, so there’s not likely to be much that differentiated about your products and services that your competitors aren’t hearing and implementing. Finally, crowds are very comfortable with the “status quo” and well known options as opposed to uncertain or untested options, so most innovation based on wisdom of crowds input will be incremental at best. Our contention is that wisdom of crowds can be a part of an innovation program, but should not be considered as the entire program, for obvious reasons (how many times has a group in a meeting made a decision that no one individually would ever make?). Experience demonstrates that wisdom of crowds breaks down when ideas are radically different from the status quo, when ideas are new and untested, when the groups evaluating ideas are too homogeneous or when a small, vocal group demands its ideas receive consideration. Look no further than the presidential race of 2008. Wisdom of crowds and prediction markets anointed Hillary Clinton as the most likely Democratic contender in late 2007 and early 2008, but a determined group within the electorate and missteps by the Clintons changed the field and Barack Obama became the Democratic candidate. If the decisions were made early in the year by the crowds or prediction markets, Clinton would have sewn up the nomination very early.

At the other end of the spectrum, organizations build evaluation teams with defined evaluation criteria and specific roles. These evaluation teams generally have representation from a wide range of business functions, and are chartered to evaluate ideas based on their specific merits for the business, not for any

specific line of business or function. These teams are generally formed and receive training and remain intact for a specified period of time to review a range of ideas, and evaluate the ideas using a consistent set of evaluation criteria and success factors. An internal team made up of cross-functional experts is much more likely to be able to consider game-changing and disruptive ideas and evaluate them in light of the market opportunities and internal capabilities than an external crowd.

An evaluation process made up of internal, cross-functional experts can derail good ideas and reinforce “safe” conservative ideas depending on its makeup and structure. Like any small team, even an internal team of experts can overlook key issues or challenges or downplay their significance. Additionally, while it can be easy to get a broad swath of the population to rate or give feedback on an idea, it can be difficult to have an “expert” commit the time necessary to adequately evaluate an idea.

Making choices

After reviewing these facets or spectrums, it's reasonable to recommend combinations of these to kick off innovation programs. As your innovation capabilities grow, it's also possible to "morph" your position on several or all of these spectrums.

Examining three likely scenarios

Within a firm, innovation can take on a number of shapes or perspectives depending on the intent of the innovation, the breadth of involvement across the organization and the resources and funding available to the innovation team. Based on the criteria we've listed above, we'll now consider several innovation formations that will seem familiar and look at which of the criteria were implemented and the impact of those selections. The three scenarios we'll examine are:

- A Skunk works
- Broadly participative innovation
- "open" innovation with selected business partners

Each of these approaches has been used successfully to generate new products and services. We'll examine the structure of each of these approaches, and the benefits and limitations of the approach.

Small, closed, secretive innovation

You may be familiar with the SR-71 Blackbird or the U-2 spy plane, both of which were products that originated in the original Skunk Works from Lockheed Martin. The original skunk works was a facility designed to be separate and distinct from the rest of Lockheed to build aircraft for the US defense industry. You may also be familiar with the Apple Macintosh, probably the most famous innovation from a commercial firm skunk works. When the Mac was first designed, Steve Jobs created a different office, different physical space and different design rules and techniques and did not let the Mac team discuss its design or development with anyone else. This was intended to keep the design secret and to keep the more conventional design ideas and barriers out of the new product. His comment to the team? "It's better to be a pirate than join the navy." The team created a Jolly Roger flag and hung it from its office building.

A typical skunk works operation focuses on significant disruption to the industry, so incremental ideas may be generated but won't be considered within the skunk works in any great detail. The skunk works is usually established to keep the concepts and designs secret and to physically (and mentally) remove the participants from the bureaucracy and thinking of the existing culture. A skunk works is almost always a creation of a very senior leadership team, focused on significant, disruptive innovation, so the work is clearly in line with the executive team's strategic goals.

The key decisions when designing an innovation program around a skunkworks model are: internal, directed, and disruptive. Unlike other models, once a skunkworks is created there's little flexibility or movement on these criteria – a skunkworks does not evolve into an “open” innovation model and does not seek broad participation or generate incremental ideas.

The outcome of a skunk works is usually one significantly new product or service that the team conceives and evaluates, and in some instances pilots and develops. Often, once the team releases the new product or service they disband to support the product or join a new skunk work team.

Facet	Deployment	Comments
Internal/External	Typically, skunk works are isolated from other internal staff, and are even more secretive and isolated from partners or customers. This is usually a very internally driven innovation approach.	Skunk works are very risky from this perspective, since the team may spend a significant amount of time and energy on a product or service that does not meet a customer need.
Skunk works/Broad Participation	Skunk work	
Suggestive/Directed	Usually directive, since the target or area of opportunity is defined by the executive team that commissions the work	The risk is that the team spends a significant amount of time on one market opportunity and does not consider other markets
Incremental/Disruptive	Disruptive	Skunk works are almost always used to create a significantly new product or service. The investment in a skunk works is simply too high to generate incremental innovation
Centralized/Decentralized	The skunk works is directed centrally but is generally separate from any oversight or interaction with the rest of the business	
Project/Capability	Skunk works are almost always developed for a specific intent or purpose and are rarely sustainable	
Individual / Team	A Skunk works is a defined team	

Facet	Deployment	Comments
Wisdom of crowds / Experts	Ideas within a Skunk works are usually evaluated by a small set of experts	
Product/Service/Business Model	What kinds of ideas are accepted	In an early innovation effort, it is usually the case that “acceptable” ideas follow the strengths of the line of business. So a product centric firm focuses on product ideas, a services firm on services ideas and so forth.
VC Model/Contests/Business plan review	The program and its ideas are funded by a direct investment or budget from executive leadership. Typically the ideas do not need additional funding.	

Engagement across the organization

Many firms seek broad engagement to demonstrate that the ideas of the employees and their investment and involvement in the organization is highly valued. In this case, the innovation program is likely to receive ideas from a broad spectrum of the organization with less focus on ideas from external partners. Broadly participative innovation can take several forms – idea campaigns and directed ideation and/or suggestion box models which allow anyone to submit any idea. These programs generate primarily incremental ideas that aren’t overly difficult to implement and solve a near term issue or challenge. Using these kinds of programs, an executive team can demonstrate that it is interested in the ideas of its employees and intends to capture those ideas and implement them.

A broad, participative program can dramatically increase employee involvement and engagement if the ideas are evaluated and implemented, and a continuous program of innovation is created. This approach is also very dangerous. If the ideas are gathered but not implemented, or ideas enter a “black box” and the participants don’t receive timely communication, the participants can very quickly lose interest and become very cynical toward the program.

Facet	Deployment	Comments
Internal/External	Broadly participative programs are generally internally focused, but ideas can be gathered or submitted by customers or business partners	There’s no limitation that blocks a third party from participating.
Skunk works/Broad Participation	Broad Participation	

Facet	Deployment	Comments
Suggestive/Directed	Idea campaigns are directed. A senior executive is usually involved selecting a specific issue or topic for ideation. Open suggestion boxes, on the other hand, are broadly participative but not directed.	The team can choose the amount of directed ideation versus open suggestion or both can operate concurrently.
Incremental/Disruptive	Incremental	Most broadly participative ideas are incremental in nature, due to the difficulties of indoctrinating a broad range of people to think differently
Centralized/Decentralized	Broad, participative innovation is usually sponsored and managed centrally, due to the communication needs	
Project/Capability	These can be run as projects but using a repeatable process and model	
Individual / Team	Ideas could be managed by an individual or a team	
Wisdom of crowds / Experts	This approach can use either evaluation model or both	
Product/Service/Business Model	Any kinds of ideas	
VC Model/Contests/Business plan review	A broadly participative model is usually a collaborative model, so the ideas usually are fed into a business plan review rather than advocated by an individual	

Innovation with qualified business partners

Open innovation is gaining tremendous awareness, however the range of “open” innovation models varies widely. A firm can work with a third party to develop and write requests for proposals to respond to specific needs, or can place a request for ideas on its website, or can work with specific partners. Many firms are choosing to work with pre-screened, pre-qualified partners to reduce the number of potential partners and increase the odds of success.

Using a proprietary network, a team selects a number of partners who can assist in specific areas and pre-screens them to assure they will be able to add value and understand the challenge or opportunity. When innovating, a sponsoring firm can identify a challenge or opportunity and ask one or more pre-qualified partners to work with it. These pre-qualified partners have previously demonstrated their

knowledge of the market and have indicated a willingness to work with the sponsoring firm, so the learning curve is lower and the hurdles to get started quickly are reduced.

Facet	Deployment	Comments
Internal/External	External	In this approach the firm is working with pre-qualified business partners or customers to generate ideas and create new products and services
Skunk works/Broad Participation	Small team	Usually this approach involves a small team from a selected product or service, but the team is not as isolated or independent as a skunk works
Suggestive/Directed	Directed	The teams agree to work together on ideas to solve a specific opportunity or address a specific market.
Incremental/Disruptive	Both	These proprietary networks are put in place to create new products and services – those products and services may be incremental innovations and/or disruptive innovations
Centralized/Decentralized	Decentralized	
Project/Capability	Project	Usually these agreements are developed and managed on a project by project basis
Individual / Team	Usually working in a team comprised of members from your company as well as from your partner	
Wisdom of crowds / Experts	Ideas within partnership are usually evaluated by a small set of experts	
Product/Service/Business Model	What kinds of ideas are accepted	
VC Model/Contests/Business plan review		

Conclusion

Your innovation capability is defined to a great extent by your conscious or unconscious decisions about intent, structure and process for innovation. The facets or options we've described in this paper are important inputs to your innovation team. They define the strategic intent and expectations of the team and provide scope and boundaries for its work. Making active choices about these facets at the outset will ensure that your team is defining its scope appropriately. The innovation team should carefully re-evaluate these facets on a regular basis as the innovation model matures to ensure that all the possible options are implemented.

If you ignore these facets at the outset you will find yourself constantly revisiting them, since the innovation program needs clear strategy and scope in order to operate effectively. While it may seem burdensome initially, a careful consideration of these facets at the outset, with a periodic review as your capability matures, will ensure a more successful innovation program.

Our recommendation for most customers is to start their innovation programs focused on ideas from within the organization, leveraging broadly participative processes like brainstorming and idea campaigns. These processes are easier to deploy and create an overall sense of engagement. Using these tools implies a bias initially toward more incremental ideas. Once these capabilities mature, then your team may want to change to a more "open" model or create a disruptive Skunk works team. We actively encourage our clients to consider all types of innovation – product, service and business model, but you may find it easier getting started to focus on the core competencies and existing delivery models of the firm.