The next time you are feeling cynical about the current state of leadership in your organization, go read the business books on innovation that were popular about five years ago. It’s the intellectual equivalent of slowing down as you pass a wreck. Innovative business practices that were heralded as the next new thing are strewn to the side of the road with their “fast track” leaders looking on in state of bewilderment. Inevitably, the very publications that lionized these pacesetters rarely miss the chance to take them down a few pegs when the road to innovation does not go smoothly.

What they fail to acknowledge is that innovation is terra incognita. It is the undiscovered land for which there are no maps by which to navigate. As the philosopher Søren Kierkegaard put it, “Life can only be understood backwards; but it must be lived forwards.” Innovation, at best, is a work in progress that confronts us with three fundamental differences that distinguish leading innovation from simply leading the enterprise.

First, the more radical the innovation, the more likely it is to materialize, and pay, in the future—for which no data exists. Economists call these types of investments latent, intangible, and convex forms of value. What they mean is that innovations, like children, are not born as adults. They need to develop into something special over time. Even with the best-laid plans, it is through
experiences and experiments that we can see over time what an innovation will
grow up to be. Know that obsessively planning, or collecting data, for something
that hasn’t yet happened (the future) is, in fact, a form of resistance. It often
stops us from attempting the insightful trial with all its enlightening errors.

Second, the more discontinuous the innovation from its predecessors, the
more likely it is to fail early on. The battle cry of top design studios is “Fail
often to succeed sooner.” One might also add, “Fail out of sight.” They under-
stand that a “failure cycle” is inevitable. Instead of trying to avoid it, they try to
accelerate it, believing that there may be something better just over the next hill.
Innovation is seldom found by those who seek it through effortless superiority. It
is the realm of the intrepid and the foolish.

Third, innovation and learning are linked. We observe what works and
what doesn’t work. We add potential improvements until the various elements
fall into place. It is from the process of creativity and discovery that we are able
to become reflective and self-aware of our practices, deriving simple rules that
can be replicated. Wisdom is cumulative.

An innovation by definition only exists, as such, for a very brief moment in
time. Last year’s must-have device is this year’s junk, just as the business model
that brought prosperity to the financial services sector is the same one that now
makes it ill.

In this never-ending cycle, our heroes become villains, and over time, rise
again like Lazarus, or at least, Steve Jobs.

Innovation Isn’t a Thing; It’s an Attribute of Many Things

One of the biggest challenges to making innovation happen in a firm is establish-
ing a shared meaning for what exactly is meant by the term “innovation.” Pick up
any business magazine and you are likely to find a detailed list of the most innov-
ative companies in the world. Look a little closer and you will find that some of
these businesses excel at marketing, while others at technology development, and
yet others don’t seem to do anything special, but are great at increasing revenues.

The point is that these examples are all over the board, because innovation
happens in several different forms, at different times, in different industries.
The problem is that if the leaders in an organization don’t share a common
understanding of what exactly innovation is, they can’t get there together.
Unfortunately, the state of innovation efforts in complex firms is often typi-
fied by disjointed initiatives. These are isolated projects that can’t be scaled as
well as unique products or services that fail to exploit the long tail of additional
opportunities for growth.
The late Marshall McLuhan (1964), University of Toronto professor and cultural guru, suggested a functional definition for innovation that is easily recognizable by anyone in an organization:

Innovation . . .

1. **Enhances something.** It makes a product, service or solution better or new. Think about how Google made searching the web easier.
2. **Eliminates or destroys something.** It replaces the old with the new. Think about how Charles Schwab changed how we buy our stocks.
3. **Returns us to something in our past.** It gives us an opportunity to recover what we have lost and long for. Think about how Barnes & Noble book stores feel like the library at our old college campus.
4. **Over time reverses into its opposite.** It is just a matter of time before what was a solution becomes the new problem. Think about how email was going to set us free and, now, we are all enslaved by it.

Most importantly, McLuhan reminded us that innovation, like beauty or quality, isn’t a thing; it’s an attribute of many things. It is for this reason that innovation happens everywhere, everyday with everyone. Innovation, essential for organic growth, has moved beyond the specialized alchemy of the R&D lab and it now encompasses all aspects of the business. Leading innovation is as much about connecting dots and crossing boundaries as it is about being inspired or creative.

**The Innovation Genome (3+4 = 7)**

Whether exploring the uncharted world in the 1500s, or cracking the code on the DNA building blocks of life, journeys through complex environments require some type of a map. This guide is required to successfully navigate the unexpected twists and turns, and create a replicable pathway for others to follow.

The Competing Values Framework, often referred to as the Innovation Genome, was developed over the span of twenty years by a small group of professors at the University of Michigan to explain how the market dynamics of value creation affect the use of specific organizational processes (see Figure 1). It linked leadership practices to the development of an appropriate culture and competencies for innovation and growth. In essence, utilizing it creates a straight line between what leaders routinely do and how the market rewards their efforts. It also creates a shared language and map for leaders, at all levels, to understand how they contribute to or destroy specific forms of value.
As a mnemonic device to better understand how innovation functions collectively, it may be helpful to remember the following: \( 3 + 4 = 7 \). As we shall see, there are 3 levels of innovation and 4 competing values that develop in 7 stages.

**Levels of Innovation (The 3 P’s)**

There are three levels to leading innovation that start with the end result first and then work backwards to the appropriate organizational practices and, finally, your personal leadership behaviors.

The first is the level of *Purposes*, or as they are sometimes called, value propositions. Improved quality and revenue growth are two examples of a value proposition. What desired outcomes does your organization seek?

The second is the level of *Practices*, meaning those organizational activities that are used to produce the intended Purposes. These include everything
from strategic planning to hiring and staffing. How are we going to achieve our desired outcomes?

The third is the level of People, or what individuals do as leaders and as self-interested participants in the organization. This level deals with how we manage ourselves and those around us. How am I going to lead to help my team, and myself, to develop the appropriate capabilities that will produce our desired outcomes?

In essence, this view is the opposite of most typing indicators such as MBTI or DISC that start with the personal preferences, or the tendencies, of individual leaders. This approach assumes that the situation, meaning the macroeconomics and other large scale forces, drive the selection of appropriate business practices, not the other way around. Markets care little about your style, but handsomely reward the ability to lead according to the greater dynamics in play.

Competing Values of Innovation (The 4 C’s)

Like everything in life, leading innovation is inherently about making effective tradeoffs. What are you willing to give up to gain what you seek? All too often, leaders suffer from the ‘do it all’ Supermom mentality and inadvertently create a mélange of mediocrity. Having it all, at the same time, is at best difficult and, at worst, destructive. Sometimes the most effective leadership decisions that enable innovation are more about stopping current practices than starting new ones.

There are four fundamental forces, or competing values, that work in different ways to produce innovation: Collaborate, Create, Compete, and Control.

Collaborate represents the social approach to making innovation happen through human relations. This approach emphasizes community, cooperation, and the development of knowledge. Leaders build the organization by encouraging trust, commitment, and relationships. This results in empowered individuals. This unified behavior produces a strong organizational image in the marketplace. The idea of community extends to customers, who often are seen as partners in the business process. Think about how Singapore Air differentiates itself through its outstanding customer service, or how Linux has developed its software so that anyone associated with its community can use it and add to it. This is typically the slowest form of innovation to create, because it focuses on building the underlying organizational culture and competencies for innovation, but it is also the most sustainable form.

The opposite of the Collaborate communal form of innovation is Compete, which represents a Darwinist approach that focuses on the rational pursuit of success, often at the expense of weaker competitors. A game of winners and losers, high achievers thrive in this course of action. The Compete approach is
focused on performance and goals. These leaders are most comfortable in a results-oriented environment. They enjoy challenges and the hard work necessary to win. The *Compete* approach motivates leaders to move quickly on short- to mid-term opportunities for increasing profitability, market share, and brand equity through high-powered initiatives, deals, and acquisitions. Examples include perennial heavyweight champions such as General Electric in the United States and the Indian giant Tata Group. Both have hundreds of companies working independently to crank out shareholder value, year after year. This form of innovation is the fastest of all four, but is not typically sustainable, because its “sweat shop” approach gives little concern to the development of the workforce.

There is a tension between the *Collaborate* and *Compete* forms of innovation that shows up as everyday tradeoffs regarding how fast an organization, team, or leader must move to act upon innovation. The question, “How fast?” is key to this positive tension. Do we pursue sustainable organizational competencies and culture, which take time to develop, or do we pursue a short-term opportunity, which must be acted upon quickly? This temporal element of innovation determines which projects are funded, who leads these efforts, and what strategic horizon the firm will focus on.

The differences between these approaches are not so much personal preferences as they are competing forms of value. For example, innovation training programs, typically a *Collaborate* method, seldom produce tangible short-term results and are therefore seen from the *Compete* point of view as destroying the key goal of short-term shareholder value. For this reason, there is often a tension between the head of human resource development and the head of finance. Each sees the other as destroying his or her value proposition. This tension is constructive, because it produces the hybrid, higher-level forms of innovation that are both sustainable and opportunistic. Managing this opposition is one of the hallmarks of high growth firms.

The *Create* approach pursues breakthrough innovation through open systems and a wide array of experiments to see what new opportunities emerge. Venture capitalists and high-tech firms, alike, embrace this high-risk, high-reward method because it is often generative. That is, it produces new knowledge about products and markets and, with a little luck, secondary solutions that may be even more valuable. Consider how the Apple iPod, which was a huge success on its own, gave rise to iTunes, creating even greater opportunities for the firm. These leaders tend to be generalists and artists, people who enjoy finding multiple answers to problems and are able to easily shift directions while they are problem solving. Due to its fluid, idea-generating nature, the *Create* quadrant leads to breakthrough products and services, which in turn can cause radical changes in the marketplace.
Leaders employ the Create quadrant to drive innovative ideas that spur growth. They strive to develop products, services, and methods that will serve their internal and external customers in the future. To accomplish this, leaders must develop a compelling vision that emphasizes new ideas, technologies, flexibility, and adaptability. Create is often referred to as the “forward position” of innovation, because it is in this form that entrepreneurial concerns or radical experiments provide some proof of concept, that it can be done. Companies like BMW and Genentech fit this description, as their basic approach to innovation involves providing very unique and proprietary products and solutions to the market. While this approach provides the greatest magnitude of innovation, it also brings the greatest risk.

While Create represents the forward position of innovation, Control brings up the rear, focusing on internal process controls. That is the back end of innovation that requires a firm to produce continuously improved products and services en masse. The Control quadrant represents incremental innovation—taking something that exists and modifying it to make it better. This approach has a safety-net feature to it, and for this reason it’s particularly useful in situations when failure is not an option, such as medical devices or aviation. Leaders using this approach also tend to focus on systematic, careful, and practical solutions that allow large-scale and complex organization to operate efficiently. They engender a culture of planning, creating systems and processes, and ensuring compliance. The end result of these innovative practices is not so much an entirely new product or service, but instead an existing product with minor variations. Firms like Toyota and Dell, known for quality and value based pricing, are good examples of the Control approach. While mitigating risk better than the other forms, this approach often brings unwanted bureaucracy.

There is a second tension involving the Create and Control approaches that is based on the magnitude and commensurate risk to be assumed in pursuit of innovation. The question “How much?” defines the center of this positive tension. Do we pursue revolutionary innovation, which brings great risk and expense, or do we pursue incremental and scalable innovation, which has less risk but often lacks sufficient inventiveness to develop new markets? The level of ambition, and corresponding risk, often determines the course of action a firm will take. For example, a start-up biotech firm will typically develop very novel therapies because it lacks the resources to compete on scope or scale. An incumbent pharmaceutical company, however, will develop relatively minor enhancements to an existing medication to extend the life of its patents and revenues.

Again, these competing forms of value also produce tensions in innovation practices. The product development incubator, located near a major research university, becomes an orphan to the core business because its pursuit of the novel is at odds with the existing operating plans, while the product
management process, run by operations, inadvertently strangles new ideas through the use of repetitive and functionally restrictive systems. When effectively balanced, these antagonistic forms of innovation work in concert to coordinate the cycle of the “new” as it transits into the “better.”

Table 1 provides a summary of the four values.

<table>
<thead>
<tr>
<th>Values</th>
<th>Collaborate</th>
<th>Compete</th>
<th>Create</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge</td>
<td>Profits</td>
<td>Innovation</td>
<td>Growth</td>
<td>Efficiency</td>
</tr>
<tr>
<td>Long-term development</td>
<td>Short time to market</td>
<td>Small scale</td>
<td>High variation</td>
<td>Large scale</td>
</tr>
<tr>
<td>Community focused</td>
<td>Shareholder focused</td>
<td>Accelerate failure</td>
<td></td>
<td>High complexity</td>
</tr>
<tr>
<td>Sustainable</td>
<td>Competitive</td>
<td></td>
<td></td>
<td>Failure is not an option</td>
</tr>
<tr>
<td>Drivers</td>
<td>Values</td>
<td>Goals</td>
<td>Vision</td>
<td>Process</td>
</tr>
<tr>
<td>Practices</td>
<td>Culture and competency development</td>
<td>Performance scorecards</td>
<td>Creativity methods</td>
<td>Business process improvement</td>
</tr>
<tr>
<td></td>
<td>Team building</td>
<td>Project portfolio management</td>
<td>Think tanks</td>
<td>Benchmarking</td>
</tr>
<tr>
<td></td>
<td>Training and coaching</td>
<td>Mergers and acquisitions</td>
<td>Corporate venturing</td>
<td>Simulations</td>
</tr>
<tr>
<td></td>
<td>Organizational learning</td>
<td>Branding programs</td>
<td>Leading innovation and growth programs</td>
<td>supply chain management</td>
</tr>
<tr>
<td>Leaders</td>
<td>Talent focused</td>
<td>Goal focused</td>
<td>Visionary</td>
<td>Pragmatic</td>
</tr>
<tr>
<td></td>
<td>Community oriented</td>
<td>Action oriented</td>
<td>Creative</td>
<td>Methodical</td>
</tr>
<tr>
<td></td>
<td>Patient</td>
<td>Decisive</td>
<td>Optimistic</td>
<td>Objective</td>
</tr>
<tr>
<td></td>
<td>Empowering</td>
<td>Competitive</td>
<td>Enthusiastic</td>
<td>Persistent</td>
</tr>
<tr>
<td>Environments</td>
<td>Collaborative workplace</td>
<td>High pressure and impact</td>
<td>Stimulating projects</td>
<td>Clear roles and responsibilities</td>
</tr>
<tr>
<td></td>
<td>Shared values and vision</td>
<td>Fast moving</td>
<td>New initiatives</td>
<td>Replicable processes</td>
</tr>
<tr>
<td></td>
<td>Integrate personal goals</td>
<td>Quantifiable results</td>
<td>Independent work streams</td>
<td>Standards and regulations</td>
</tr>
<tr>
<td></td>
<td>Informal</td>
<td>Winners and losers</td>
<td>Diverse workforce</td>
<td>Structured workflow</td>
</tr>
<tr>
<td>Examples</td>
<td>WL Gore</td>
<td>GE</td>
<td>Genentech</td>
<td>Dell</td>
</tr>
<tr>
<td></td>
<td>Linux</td>
<td>Microsoft</td>
<td>Google</td>
<td>Toyota</td>
</tr>
<tr>
<td></td>
<td>Harley Davidson</td>
<td>IBM</td>
<td>Apple</td>
<td>McDonald’s</td>
</tr>
<tr>
<td></td>
<td>The Body Shop</td>
<td>PepsiCo</td>
<td>Virgin</td>
<td>Boeing</td>
</tr>
<tr>
<td></td>
<td>S.C. Johnson</td>
<td>Goldman Sachs</td>
<td>Pixar</td>
<td>Wal-Mart</td>
</tr>
<tr>
<td>Down Side</td>
<td>Slow</td>
<td>Not sustainable</td>
<td>High risk</td>
<td>Incremental</td>
</tr>
<tr>
<td>Up Side</td>
<td>Sustainable</td>
<td>Fast</td>
<td>Breakthrough innovations</td>
<td>Little risk</td>
</tr>
</tbody>
</table>
Of course, these approaches to innovation are meant to delineate the basic map with its four directions. In reality, all situations, practices, and people employ multiple approaches to innovation, but like people who are left- or right-handed, they tend to use one over the others. For example, investment banks tend to move toward Compete results, such as short-term profits, and employ practices such as portfolio management, whereas universities typically aspire to Collaborate results and work across decades on developing their communities of scholars. The same can be said about nation-states and cultures. While Create forms of entrepreneurism, with their highs and lows, may be generally accepted in northern Italy with its history of unique fashion design, Control forms may be more suitable in Singapore with its Utopian sensibilities.

One size doesn’t fit all. “Do this and you will succeed” lists are only helpful in the context of a specific situation. As we have seen, many innovation practices are actually counterproductive, if not applied in the right place at the right time. Without the proper coordination, they may actually displace other useful practices. Effective enterprise innovation requires both alignment between intended outcomes and the practices that produce them, plus an appreciation of the diversity needed to develop innovation from ideation to scalable implementation. Today’s innovation leader must take a higher point of view, integrating the four approaches, to effectively growth the business in the face of complex demands, aspirations, and practices.

### Stages of Innovation (The 7 S’s)

The late Harvard economist Joseph Schumpeter famously coined the term “creative destruction” to describe the innovation cycle, how old ways of doing things are inevitably replaced by new ways in an unending cycle of growth and decay. This economic cycle closely resembles how organizations grow from entrepreneurial concerns (Create) into socio-economic entities (Control and Collaborate) and finally into the mature enterprise (Control). Product developers will also recognize this basic pattern in the “commoditization cycle” of products. In economies, organizations and products, services and solutions, the ‘better’ and the ‘new’ take turns replacing each other.

This innovation cycle can be closely followed in developing innovation leadership capabilities in the firm. There are seven basic stages, by which leaders begin to integrate the three levels of innovation with their four competing values (see Figure 2). These stages are used to “creativize” the enterprise, by enlisting most of its members in the activity of adding innovation to what would, otherwise, be considered ordinary business practices and projects. They make organic growth a fundamental part of the way that the organization functions on a day to day basis.
1. **Synthesize**: In this stage, leaders assess and diagnose the organization’s culture and competencies. This stage is used to become aware of the strengths, weaknesses, and preferences of the organization, and its leaders, relative to other parts of the company, and as well as competitors and partners. Like a football coach at spring training, this is where the team’s abilities are collectively assessed.

2. **Strategize**: In this stage, leaders create a vision of the future and a roadmap that leads to it. Strategy is not only derived by examining internal strengths and weakness, but also by considering the competitive landscape and market opportunities. It is here that strategic targets are defined and a plan to hit them is crafted in its most preliminary form. The goal here is to create high-quality targets.

3. **Socialize**: In this stage, leaders establish a shared vision and values in the leadership team. It is not enough to see the future first, it must be agreed upon. Are these strategic goals where we really want to go? How are we going to act as an organization on our way to these goals? Typically in off-sites or
retreats, this is where the leadership team comes to an agreement on how they will lead together.

4. **Supervise**: In this stage, leaders develop process experts to sustain the change and innovation. Like any craft, innovation requires highly practiced deep domain expertise. Just as there are quality black belts in the Six Sigma quality process, firms often elect to develop ‘innovation black belts’ to supervise innovation projects and initiatives, developing a community of innovation practitioners. This is typically done through mentoring, practicum, and some form of certification. Apple’s Fellows and 3M’s Carlton Society are excellent examples.

5. **Synchronize**: In this stage, leaders are engaged throughout the organization to operationalize the strategic vision. It’s not enough to have a great plan; all the key members of the firm need to contribute and buy into it. Here leaders, at all levels, develop ownership for making innovation happen. Typically, this is where representative members of the organization, at large, come together at summits and conferences to put the pieces together and connect the dots—to sync the whole thing up.

6. **Specialize**: In this stage, leaders and “innovation black belts” jump-start the change and innovation project teams. Successful product design firms and project-based organizations, like advertising agencies, have well-developed rapid action processes for launching and accelerating project teams. These jump-starts, or workouts, as they are sometimes called, are typically used to create momentum and move a challenge (or novel concept) from the brainstorming phase to the development of several prototypes. The aim here is to make multiple shots on goal.

7. **Systemize**: In this stage, leaders review and revise projects, adjust organizational practices, and learn what works and what doesn’t. Innovation is an iterative art in that each attempt reveals a new learning that brings one closer to the masterpiece. Here the leaders of the organization become self-aware and make real-time adjustments to all previous stages of innovation. Potential improvement points are gathered, business practices are adjusted, and projects are advanced, killed, or morphed. Most importantly, simple rules are derived from the experiments and experiences, so that next practices can be searched and reapplied throughout the organization at large. Learning becomes a vehicle for recreating all aspects of the entire innovation cycle.

Like innovation itself, innovation leaders develop in cycles that move them from novice to master practitioner. These skills are typically not honed through conventional leadership responsibilities precisely because innovation is predicated on what you currently don’t know how to do. All learning is developmental. Take out a piece of paper and draw a picture of your spouse—anyone can
tell at what age you stopped learning to draw. The same is true for learning a language or playing an instrument. As in other areas of expertise, like medicine, a “see one, do one, teach one” approach often both improves and accelerates the learning process.

Making Innovation Happen Everywhere, Every Day

Innovation operates in relatively predictable ways at all levels, across all industry segments and in all cultures, but how you innovate is what you innovate. It is the approach and ability that determines the outcome.

Here are some things to do to help make innovation happen where you work:

1. **Ditch the “here’s the right answer” list.** One size doesn’t fit all. Start at the end with the value proposition you are trying to create, and work backward to what type of culture and organizational competencies that are required to create it. Make your own list, then, for your specific situation.
2. **Learn to love the people and practices that you now hate.** Machiavelli famously said “Keep your friends close and your enemies closer.” Consider the people who approach innovation from the opposite point of view as your greatest asset. Forget about improving your areas of weakness. Surround yourself, instead, with people who are already good at these and work with them. Go beyond being ambidextrous; embrace the conflict of competing values as the real engine of innovation.
3. **Take a portfolio view.** Every function, project, and task has a different reason for being performed. If you optimize to one approach, inevitably you will sub-optimize the others and even destroy the value proposition they were designed to create. Work to create balance in your team and your practices. Be mindful as to where, and when, each is the most appropriate and effective.
4. **Bet on people, not just processes.** Every process in the firm is “owned” by someone powerful who uses it for his or her own purposes. It is unlikely that you can change these practices to better accommodate innovation. You can find leaders, however, who have successfully navigated the complex and political organization to move innovation through the system. Support and develop these leaders.
5. **Make stone soup.** In the classic children’s story, two soldiers with no money or food engage wary villagers to participate in the cooking of stone soup. Each willingly adds some small ingredient until it turns into a sumptuous meal for
all. All people are creative. Most of them want to contribute to initiatives when they can have an impact and grow. Give them the opportunity and watch the momentum build.

6. **Connect the dots.** Innovation is more about the coordination and integration of its diverse forms, rather than the mastery of any single approach. It is the transitions from ideation to implementation, from marketing, to manufacturing, to service—where innovation often fails. Novel solutions will occur in the gaps, in the handoffs across established boundaries. Be the bridge.

7. **Leave room for the stuff you don’t know now.** The fundamental difference between leading, and leading innovation, is simply that the latter requires that you constantly change course as new things emerge. Planning and mastery give way to what is revealed from your experiments and experiences. The future emerges in real time. If your act of creation went according to plan, imagine all the opportunities that you missed along the way.

In the end, our effectiveness as leaders is not determined by our own abilities, but rather, our ability to develop capabilities for making all things better and new in much larger groups of people.