

INNOVATION VS. IMPLEMENTATION: Mastering the Tensions

*Innovation is no longer an option for success, say Dean **Roger Martin** and Dr. **Hilary Austen**. It is a prerequisite, and one that poses numerous challenges for today's firms and their workers. Employees will have to develop new capabilities, and innovating in today's marketplace requires skills more typical of an extreme sport than a leisurely game of golf.*

Innovation and creativity have always been important routes to business success, but historically, they have not been prerequisites for success and profitability — until now. The principal reason for this change is the increasing pace of competition — the process **Joseph Schumpeter** called 'creative destruction.'

In Schumpeter's view, businesses in a given industry — let's say traditional wire-line telephony — would invest and prosper until a new competitor utilizing a new business model came along — let's say wireless — and, in effect, destroyed the old industry through its creativity. Those in the old industry would be livid, convinced that it was bad for the economy for so many of their expensive assets to be transformed into worthless relics, and for so many of their employees to lose their jobs. But Schumpeter argued that the economy was actually *better off* when this occurred, because the creation of a new, effective and efficient industry outweighed the losses of the old industry. In fact, according to him, the world moved forward inexorably through this process of creative destruction.

Over the last two centuries, the rate of creative destruction has provided a sufficiently long cycle time between a given transformative innovation and its successor for assets to be acquired and a return earned on them before they became obsolete, and long enough for new skills to be mastered and careers to take shape.

In this world, there were two generic ways to make money: either you created a valuable innovation, or you observed someone else's valuable innovation and replicated it as accurately as possible. That is, you were either a **Thomas Edison**, or one of the enumerable electricity companies and light bulb manufacturers to prosper over the next century. The cycles were long enough, and the mode of competing stable enough, that being a non-innovative, non-creative

ILLUSTRATION: OLEG KOLIKOV/THREE IN A BOX

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follower was enough to produce success. Being a worker in such a company required attending carefully to the most innovative thing happening in your industry and then copying it effectively.

An innovation strategy was simply one *option* for succeeding — and in some industries and situations, this continues to hold true today. However, we would argue that viewing creativity and innovation as mere options for succeeding is a dangerous way to approach business in the 21st century.

Why? Because in many industries the process of creative destruction has accelerated significantly. With more competitors, from more countries, and more diverse ideas in almost every industry, new concepts and models are being introduced ever faster. *Following* — in its historic form — is becoming fundamentally uneconomical because followers are having less and less time to make their investments pay. In fact, the same holds for innovators, but they have more leeway. Imagine a follower takes three years to make an investment to replicate an innovator. If the cycle time between fundamental, game-changing innovations is 30 years, the innovator will have 30 years to earn a return on its assets and the follower 27 years — plenty of time in both cases. However if the cycle is five years, the innovator will have five years and the follower only two years — likely the difference between a profitable investment and a big write-off.

In today's world, innovation and creativity have become necessities for firms. And the implication for the individuals in them is that they can no longer prosper and grow their careers by benchmarking and replicating: they too can only prosper if they embrace innovation and creativity. This will be a sea change for those who have counted on succeeding by way of benchmarking and replicating.

Organizational Pressures

In this innovation-driven scenario, most organizations are immediately faced with the following challenges:

1. To increase the number and quality of their innovations;
2. To select the best competitive innovations from their ever-increasing pool of options;
3. To rapidly build efficiency in the selected innovations; and
4. To nimbly drop the old for the new, when the time is right.

The pressure to develop these four capabilities means that organizations will need employees to develop four matching personal capabilities for innovation.

First, employees will be charged with generating both adaptive and fundamental innovations. This means they will be responsible for creating innovative ideas, solutions, approaches and products that improve current practices, as well as change the fundamental nature of business practice. To do this successfully, they need to be **creative risk-takers** who think usefully 'outside the box.'

Second, employees will be asked to select — from the pool of creative ideas they generate — the ideas that are most likely to help the organization compete, and then gain support for these from the broader organization. To do this successfully, they need to become **visionary leaders** who can effectively identify and champion winning innovations.

Third, the individuals and groups following innovation champions will be tasked with implementing at record speed. To do this successfully, they need to become **fast-cycle learners** who can work from new orientations, develop new capabilities and skills, and redesign their work patterns with ease.

And fourth, for organizations to win the innovation strategy competition, their employees will have to accomplish the previous three



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steps rapidly and repeatedly. To do this successfully, they will need the **flexibility** required to let go of what is currently in the forefront to re-focus on new possibilities and purposes without hesitation.

The above looks neat on paper. In theory, organizations that foster *creativity, visionary leadership, fast-cycle learning, and flexibility* should respond effectively to the pressures of today's innovation-driven marketplace. Likewise, the individuals who develop these capabilities should do well in these organizations. Unfortunately, this optimism is somewhat naive.

Organizations will likely face more difficulty than they anticipate, because the capabilities that drive innovation are more easily *thought about* and *talked about* than achieved. This is true because many of us have romanticized, over-simplified ideas about:

- The real nature of creativity, visionary leadership, fast-cycle learning, and flexibility;

- What it takes to develop each as a personal capability; and
- What it will take to successfully employ these capabilities to achieve innovation inside organizations.

Innovation is not a simple matter of execution, nor is becoming an effective innovator a simple task. In truth, the personal capabilities that generate innovation are untidy, unruly, disruptive, and unpredictable capabilities that often bring with them confusion, ambiguity, surprise, vagary, conflict, and failure – experiences that few of us actively seek out. Yet, no matter how disturbing the inevitabilities are, we cannot retreat from or abandon them: marketplace pressures forbid it. Therefore, organizations are faced with learning more about what tackling innovation really means, and how to help people make it work.

The Personal Art of Innovation

The following section highlights some critical realities employees are likely to encounter as they build personal innovative capabilities:

1. Creativity: Generating adaptive and fundamental innovations.

- Because our natural ways of thinking are intuitive and self-evident, we are often unaware of the assumptions that limit our thinking ‘Getting out of the box’ is hard if we don’t know which box we are in. This means that adaptive innovations will come more easily than fundamental ones—whether adequate or not.
- Rather than being generated in friendly, roundtable brainstorming sessions, innovative ideas often spring from failures, accidents, idleness, conflict and temporary lapses of realism—behaviors few organizations find appealing.

2. Visionary leadership: Selecting and championing winning innovations

- Most fundamental innovations are, by

definition, ahead of their time and disruptive. This means champions are sometimes seen as either dangerous or foolish, rather than as visionaries (these latter judgments are often made only in hindsight.)

- Most innovations won’t pan out, and most efforts will end in failure. And because organizational tolerance for failure is low, many champions won’t last long.

3. Fast-cycle learning

- Experience is naturally conservative, and learning is difficult. Although most people say they like learning, in reality, they find it hard work and are likely to retreat to the familiar.
- Those who embark on learning innovative things inevitably suffer early failures. Adding insult to injury, they must suffer these failures in the face of an uncertain outcome, because the efficacy of any given innovation is only testable after you gain competence.

4. Flexibility

- Performance and progress are typically judged by our ability to achieve clearly defined, measurable goals. In an innovation-driven organization, stable and measurable goals may be scarce: current goals are likely to be shifting and new goals will be constantly emerging.
- Change will be inevitable, rapid, and ongoing

it demands a lot of energy and resources, and often entails shifts in power and reorganization.

All of these complications compile to create a situation that can feel unsettling, futile and possibly even dangerous to personal careers – especially in organizations unprepared to handle these dynamics effectively.

The Integration of Innovation and Implementation

To raise the stakes even higher, the increased pressure for rapid innovation in no way diminishes the importance of implementation. In fact, shortened cycle times increase pressure to implement seamlessly and smoothly. In short-cycle times, the close proximity (in time and place) of innovation and implementation also means a blurring of traditional boundaries and an integration of traditionally distinct functions. While this integration might be smart business, it will also change the nature of day-to-day business practice.

Integration unleashes the natural opposition that exists between the human forces — the attitudes, mindsets, skills and activities — that drive innovation and those that drive implementation. The chart below reveals the opposing nature of these forces:

Innovation	Implementation
Enthusiasm	Understanding
Ambiguity	Certainty
Faith	Predictability
Passion	Discipline
Openness	Conservation
Variability	Reliability

Thrown together by the integration that fast-cycle innovation demands, people who embody these antithetical mindsets will no longer be sorted safely into R&D or production functions — instead they will be working closely together. This means that unless we are careful, the marriage between innovation and implementation will be a rocky and competitive one.

For instance, imagine how the faith and enthusiasm exuded by innovators as they champion an untested innovation might be threatening to the predictability and understanding that makes implementers efficient and effective. And conversely, how the conservative practices that keep implementation humming overtime could seem stifling to the open-minded, exploratory orientation innovative thinkers enjoy. With functional barriers down, each person in the organization will now experience the full force of this natural opposition. Employees challenged with integrating innovation and implementation will be balancing, reconciling, maintaining, and trading off—but never eliminating—opposing forces.

Innovating Effectively

The preceding arguments make one thing clear: The necessity of innovation brings with it unavoidable dynamics that few organizations or individuals handle effectively—including uncertainty, failure, opposition, and the inevitability of persistent change.

Organizations that win the innovation competition will be those in which people learn to embrace these dynamics rather than burn critical resources trying to control or eliminate them. This will mean a significant adjustment for many organizations that involves three elements: **Re-framing**, **Re-skilling**, and **Re-organizing**.

Re-framing involves the adoption of new attitudes; re-skilling, the development of new capabilities; and re-organizing, the establishment of new organizational relation-

ships. To this end, we have the following suggestions for individuals and organizations. These suggestions by no means exhaust the possibilities, but we do hope these ideas illustrate our view and begin to provide a heading for aspiring innovators.

Re-framing

“Fear”, as **Frank Hebert** so vividly states in his epic novel *Dune*, “is the mind killer.” The common fear of uncertainty, of failure, and of both opposition and change is more crippling to our abilities than any of the actual difficulties these eventualities bring. When faced with uncertainty, fear often leads to a fixation on any handy goal, blinding people to the emergence of a better option. The fear of failure often stimulates a defensiveness that leads to flimsily-constructed superstitious theories about cause that hide important information about real complexities, avenues of recovery, and future implications. The fear of opposition often means the establishment of organizational camps that eliminate the possibility of learning and integration. And finally, the fear of change can turn the stubbornness that might well protect early innovations into a conservatism that can lead to obsolescence.

Based on our research into successful innovators, we can recommend the following shifts in framing and attitude. Successful innovators tend to:

- See uncertainty as an opportunity for creative freedom;
- Respond to failure with systematic curiosity;
- Treat opposition as a creative tension that can fuel performance; and
- Treat change as a means to expand knowledge and experience.

Unfortunately, there is no attitude adjustment pill that will ease the difficult transition from fear to this more opportunistic orientation. In fact, this change of attitude may be the



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most difficult of all the challenges innovators face. At the same time, accomplishing this transformation may bring the greatest hope of success, because it frees innovators to advance, rather than to withdraw, when coming face-to-face with innovation’s complications. Our best advice to help make this re-framing possible is to simultaneously develop the skills that support these changes.

Re-skilling

A shift in attitude that relies on old capabilities is a quick route to personal and organizational disaster. Innovating effectively means the development of new skills, and innovating in today’s marketplace will take skills more typical of an extreme sport than those typical of a leisurely game of weekend golf.

For example, making progress in the midst of uncertainty will require the ability to pursue multiple goals at the same time, change direc-

tion as goals shift, formulate emerging goals as they arise, and sometimes move ahead even when no goals exist. This exploratory, creative-process-style approach to progress is not a skill typically learned in business school or in management training. It is a skill that takes practice, nerve, and a number of banged-up knees and elbows to master.

Likewise, handling failure effectively is a skill given more lip service than attention. We have all heard the saying, ‘Learn from your failures’ — and it sounds good, but how do you actually do it? A curious, even-minded innovator can opportunistically investigate the pros and cons of *apparent* failure, knowing time and circumstance often cause us to reassess outcomes. These innovators can use failure to track down and revise flaws in thinking and approach that success could hide. They can also distinguish between what failure has to say about the innovation at hand, and their current capabilities—and can then avoid, as the saying goes, ‘throwing the baby out with the bath water.’ This is a systematic, scientific approach to investigation that allows innovators to use failure as the knowledge-generating, potentially-fruitful phenomenon that it truly is.

Working with tension—even when re-framed as creative fuel—also takes special skills. Once re-framed, how do innovators use opposition to energize progress? Successful innovators do at least two things. First, they use the push and shove created by opposing forces—like athletes use competition—to enhance performance by playing one off the other in a spirit of good sport. Second, they dissolve separation, transforming once-opposing forces into a new integrated activity. Achieving this transformation with innovation and implementation would mean the design of organizational systems where the distinctions between innovation and implementation disappear. For example, this could mean increasing growth rates by providing every manager

in the core business with the time, tools, and incentives they need to innovate successfully, rather than relying on a solution like ‘New Business Development Groups’ that separate innovators from the rest of the organization.

Finally, how do we respond more skillfully to change? In 1930, American philosopher and educator, **John Dewey** began to think about the demands of change. He proposed ‘flexible purposing’ as an effective way of working in a rapidly-changing environment, or in any activity that evolves as it unfolds. Yes, it is a mouthful, but it is also a visionary step that anticipated the sophisticated thinking and active intelligence persistent change requires. Being ‘flexibly purposive’ means having the ability to learn while moving steadily ahead toward ever-changing objectives, using each step forward as an opportunity to expand understanding, revise action, and reset direction. With this kind of learning facility, innovators could turn the turbulence of change to their — and their organization’s advantage.

Re-organizing

To enable personal and corporate innovation, firms will have to redesign their organizational strategy, including:

- The way they allocate and distribute the rights to make business decisions;
- The means they use to measure performance; and
- The structures they employ to reward performance.

The decision rights with respect to innovation need to be spread broadly — and explicitly so. Many managers never believe in their heart of hearts that they have the right to propose — let alone take action on — radical change. Not only do they fear being punished for failure, they often do not think innovation is their job. Rather, they think that the decision rights for radical change lie either at the very top of the firm, or in a specialized unit — such as the R&D department. Firms must make it

very clear that innovation rights are *broadly distributed* and *broadly held* in order to encourage employees to become skilled in the flexible purposing required for integration of innovation and implementation.

Firms must also overhaul the way they measure performance in order to spur this broad base of innovation. Typically, firms have long-established measures for assessing things that fall under the implementation column on page 9. The ability to generate and demonstrate certainty, predictability and reliability are well and easily measured. However, the faith, passion and openness characteristic of innovation are difficult to measure, and partly for this reason, are simply not measured. As a consequence, organizations will have the demanding task of learning to innovate and learning to assess their ability to innovate simultaneously.

Perhaps trickiest of all, firms need to align their reward and consequence systems to match the new innovation measures instead of the old implementation measures — otherwise employees won’t believe the firm truly supports innovative activity. If it is true that innovation rarely occurs unless danger and failure are consciously courted, then the firm must get serious about rewarding failure. This can be tricky, because not all failures are created equal: it can be challenging to distinguish between ‘failure in the service of innovation’ and ‘failure in the service of implementation’. However, a firm that is unable to make this distinction will not be able to measure innovation properly, nor reward it effectively. And if it fails to reward innovation effectively, it is unlikely to generate it.

In the end, the highest rewards must go to the most precious of resources in the modern organization: those individuals who are capable of integrating innovation with implementation to be creative, fast-cycle, flexible and visionary leaders — wherever they are in the firm. *Dr. Hilary Austen is a director of the Dean’s Advisory Board at the Rotman School of Management.* **RM**