Leadership for Innovation:
What Leaders Must Do for Innovation to Happen

Anthony J. Le Storti

"Leadership is crucial to innovation." At least, that is what we often hear. When projects succeed, we praise "visionary leaders" or "champions." When projects fail, we sometimes refer to "short-sighted leadership," "risk-averse management," or even less complimentary behavior. But, in practice, what exactly does it mean when we say that leadership is crucial to innovation? What is it that leaders must do or must be if innovation is to succeed on an ongoing, purposeful basis?

By examining leadership in terms of levels and phases of the innovation process, a picture emerges of a range of critical roles and responsibilities that leaders must fulfill. By taking this somewhat unusual approach, we can generate a list that provides—and prescribes—an operational taxonomy of how leadership contributes to innovative success. Conversely, if we wish to reflect on innovation efforts that fail because of leadership issues, this template offers a means of being more specific and diagnostic as to the nature and location of the gaps.

Framing Questions

It is often helpful to initiate an investigation with at least a tentative conceptual organization and a few key questions, the answers to which may provide a meaningful outcome. In the case of innovation, we can begin by conceptualizing organizational leadership as existing on three levels: operational, strategic, and tactical. At the operational level, leaders take on the overarching responsibilities for the survival and success of the organization for an indefinite period of time. At the strategic level, leaders focus on specific, high-value goals that are to be achieved over an intermediate period of time, for example, three to five years. Leaders at the tactical level focus their attention and efforts on lower-level, instrumental objectives to be accomplished in the immediate future, a time period probably measured in weeks or months. Ideally, goals, efforts, and leadership at all three levels are consistent, coordinated, and mutually supportive.

While this tri-level taxonomy offers a means of classifying organizational leadership in general, it also can be used to demark levels of leadership for innovation. It should be quickly noted that, in contemporary corporations -- organizations in which innovation is tightly tied to success and, therefore, of the highest concern -- it is rather difficult to separate corporate leadership from leadership for innovation. Yet, the intention here is to do so as much as possible. The hope is that, by temporarily partitioning off innovation-oriented responsibilities and behaviors from those of general leadership, we may gain a clearer and deeper understanding of the former. Also, with consideration for the scope of this article, the two highest levels of leadership will be our focus. (Endnote references are offered to those seeking more information regarding tactical or team-level leadership.[1]) Accordingly, our investigation may be framed in the form of two questions:

What are the overarching roles and responsibilities of leaders with regard to innovation?

What are the specific roles of leaders in each phase of the innovation process?

The first of these calls for answers at the operational level; the second focuses attention at the strategic level. Without claiming that the following lists are fully comprehensive, it still may be surprising as to how varied and numerous are the roles and responsibilities of leaders when it comes to innovation. This, in turn, starts to account for why we say that leadership for innovation is so important, or that its lack can be so detrimental.

Overarching Roles and Responsibilities

Success in the current global marketplace requires that senior executives provide direction and leadership for innovation as an ongoing corporate priority. C-level leaders must bear primary responsibility for three interconnected operations: managing the overall innovation process, developing and implementing an innovation strategy, and establishing and maintaining a culture of innovation. More specifically, these operational-level roles and responsibilities include:

Establishing and Maintaining the Vision

Researchers Teresa Amabile and Stan Gryskiewicz have noted:

"Perhaps the most important role to be played by upper management in supporting creativity involves formulating and constantly communicating a clear vision of the organization as innovative, unafraid of risk, supportive of new ideas, and offensive (rather than merely defensive) in the marketplace."[2]

It is important to note that 'vision' as used above is not synonymous with 'corporate vision.' It is not a statement about long-term business objectives, but rather a statement of something in service to those objectives. 'Vision' here is a call to develop the conditions, processes, and attitudes that characterize an organization as "innovative." It is less about what an organization will produce or achieve and more about how it will operate.

Developing Competencies for Innovation

Leadership for innovation at the operational level does not begin when a specific initiative is planned. Rather, it requires a comprehensive, long view. Leaders must envision and invest in the competencies that will be

required five, ten, or more years into the future. This will be a combination of technological investment and purposeful recruitment.

With regard to the latter, one should think not only of a pipeline of innovations, but also of a "pipeline of innovators." Recruitment, hiring, and retention of those individuals who will likely provide the spark and fuel for future innovation projects should be a crucial, ongoing human resources effort.[3]

Establishing and Maintaining a Culture for Innovation

"A universal characteristic of innovative companies is an open culture." Rosabeth Moss Kanter[4]

Although more general and diffuse than some of the other operational concerns, establishing and maintaining a culture for innovation should be one of the most important goals of senior managers. Innovation is a function of behaviors[5], but behaviors do not occur in a vacuum. Rather they are embedded in a culture and promoted or constrained by the physical and psychological environment that is a culture. Further, research has revealed explicit characteristics of a culture conducive to creativity and innovation.[6]

A comprehensive treatment of such a culture is beyond the limits of this article, but the following is a beginning description. A culture fertile for innovation is characterized by openness, cooperation, and collaboration. Work is stimulating, challenging, and intrinsically motivating. Individuals are treated with respect; and management is appreciative, supportive, and encouraging of individual and team efforts. Feedback is timely and constructive; informal recognition is frequent and meaningful; and reward, though not salient, is fairly and transparently distributed. Senior management sets the strategic agenda, but teams and individuals enjoy operational freedom as to how best to pursue that agenda. Unsuccessful efforts in pursuit of innovation are expected, well tolerated, and leveraged for learning.

Facilitating Access to Thought Leaders and Co-Creators

Leaders have to make it easy for innovators to work together. Whether we refer to 'communities of practice', 'open innovation', or 'technology brokering', it is becoming increasing clear that higher-level creativity -- and, therefore, potential innovation breakthroughs -- occur across normal conceptual and organizational boundaries.[7] High per-

formers can, of course, be recruited for cross-functional teams; but beyond those discrete experiences, leaders will want to also ensure that their innovators have easy, ongoing access to others who will extend and enhance their efforts.

Success in the current global marketplace requires that senior executives provide direction and leadership for innovation as an ongoing corporate priority.

Ensuring Information Flow

Information is crucial to creativity and new learning, which, in turn, are the building blocks of innovation. It falls to executives to ensure that internal and external information resources are readily available to high-stakes innovation initiatives. Most importantly, leadership must firmly establish cultural conditions in which information flows freely. This is crucial not only for learning and knowledge management, but also because information flow builds trust, trust contributes to collaboration, and both are conducive to innovation.

Establishing Systematic Innovation Processes

In the competitive marketplace, innovation should not --indeed cannot -- be a hit-or-miss or occasional phenomenon. Best-of-breed companies are systematic with regard to innovation. They conduct formal idea generation sessions, offer training in creative thinking and interpersonal relations, engage internal or external process facilitators, maintain innovation review boards, and have clear validation procedures.[8] Submission of ideas is easy, and consideration of ideas is fair and rapid. People know the status of their ideas as leaders provide feedback promptly.

Developing Innovation Strategies

To maximize success, innovation must be purposeful; yet it is noteworthy that many organizations do not have explicit innovation strategies. Companies have strategies for operations, finance, marketing, and so forth, but innovation, their lifeline for future success, often goes without dedicated planning. Leadership for innovation includes making clear, critical decisions regarding the investment of innovation-oriented resources.

Minimally, leaders will want to synthesize their thinking around the concept of "desired market impact." This includes determinations as to the scope and scale of creative efforts (ranging from "me too products" to hoped-for breakthroughs), the "galaxy of innovation"

(fertile target areas ranging from line extensions to "white space" far beyond current offerings), and the level of market agitation (ranging from the defensive plans of an incumbent to more entrepreneurial, disruptive efforts). It is also possible that leaders will want to develop and align strategies across a range of products, market segments, geographical regions, cultures, and so forth.

Composing the Innovation Portfolio

Once a clear strategy takes shape, leaders are responsible for investments in the innovation portfolio. In reality, innovation is an "investment strategy." In seeking the "dividends" of innovation, resources are invested with the hope of healthy (but not guaranteed) returns. The innovation portfolio, therefore, will be a function of the resources available and the risk profile of corporate leaders. Its composition may range from a few small, tightly targeted efforts to a broad, multifaceted set of short-term and long-term initiatives.[9] In fulfilling this role, we look to leaders to make highly informed, very critical judgments shaped by prudent risk-taking.

Building Dedicated Communities

As Andrew Hargadon has pointed out, one of the most frustrating things that can go wrong even with very strong concepts is that the organization can fail to bring together the additional people and resources necessary to make development and commercialization happen.[10] Once the potential of an idea has been validated, senior leaders need to ensure that a dedicated community forms around the concept to bring it to fruition and launch. This follow-through may include reorganization, new hiring, or new capital investments.

Leadership Roles by Phase

To answer the second of our framing questions, we shift our focus to the level of a specific initiative or project, for example, the invention and development of new products for a particular market. We are now considering leadership at the strategic rather than operational level, which probably represents a shift from corporate leadership to R&D, business unit, or business development leaders. The roles and functions outlined here may apply to a single leader or to a leadership

team. In the case of the latter, there will be a need for strong and willing cooperation among the members of that team. Leadership responsibilities here will be listed according to the phases of the innovation process, beginning with preparation.

Preparation

This is the "getting ready and getting together" phase in which the people and resources for a specific initiative are assembled. Leadership roles during this phase include:

• Sponsor: One or more members of the management team must accept general responsibility for the project. Sponsorship involves overall support and assistance for the operations and, hopefully, the success of a team or initiative. It falls to the sponsor(s) to negotiate and ensure the availability of team members. The sponsor convenes the team both in terms of primary action agents and any supporting or "adjunct" staff. The key concerns of the sponsor are ensuring that a promising area of investigation has been selected and the right people have been brought onto the team, but another key aspect of this role is liaison between the team and higher levels of authority

• Intelligence Officer: In order to properly launch the initiative, leadership must provide a thorough operational or strategic briefing of the area of investigation, includ-

ing a competitive analysis. The leader(s) should provide market or internal information to include current and forecasted future conditions and the possibilities of threat or opportunity that they offer.

• Challenger: The vehicle for fulfilling this function is an exciting mandate. In commissioning a team, leaders must provide a clear statement of strategic intent. To begin with, this mandate should demark the area of investigation and its purpose; that is, it should provide the rationale as to why a particular area of interest has been chosen and its potential value to the company. It should also note important administrative or logistical elements (timeline, budget, resources available, etc.). Importantly, it must outline the criteria for success (e.g., desired level[s] of creativity, anticipated annual revenues, technological considerations, time to market). Note: while this statement of direction and success criteria comes from sponsoring leaders, it is very important that the team itself be given operational freedom as to how they will conduct their work.

• Resource Provider: Leaders must secure and allocate sufficient resources to include people, funds, and time to sustain a specific project. But it is important to note that innovation initiatives often have a way of rippling through the corporate system, so the role of resource provider can be complicated and may involve more than naming people to a team and giving them time and

a budget. It often involves reassignment of responsibilities in order to free key people from their normal obligations. Since knowledge is a key resource in innovation, leaders in this preparatory phase may also need to consider what education or professional development (e.g., teamwork, technical knowledge or skills, business acumen) may be required for team members.

Invention/Discovery

As the project gets underway, the team begins its creative problem-solving. Team members focus their efforts on information processing, learning, problem analysis and idea generation. Supportive leadership roles for this phase include:

• Connector: Beyond the resources origi-

nally provided, this phase is likely to see the need for other resources. This especially may involve connecting team members to people and resources within or outside of the organization. In the role of Connector, the leader becomes a door opener, and, if necessary, a door banger. The leader now deals with colleagues to ensure that people, information, and technology are made available on a priority basis. If the organization already has an open and collaborative culture, there may be less of a need for connecting at a higher level; but in the absence of easily accessible resources, the leader should stand ready to do what is necessary to help the team complete its work.

• Guide: The leader may not know the answers to the substantive questions posed by the team as it goes about its work. This will especially be the case if the area of investigation is "out on the frontier." But in the role of Guide, the leader willingly shares experience, offers technical and procedural advice, and suggests direction when asked.

• Counselor: While the Guide role focuses on the substance of the challenge, the role of Counselor is one of assistance to the team members with regard to the interpersonal dimension of their work. This would especially include helping to quickly resolve destructive conflicts should they occur. But beyond such efforts, the Counselor can provide the very valuable service of advising the team as to how to gain approval or

Establishing and maintaining a culture for innovation should be one of the most important goals of senior managers.

acceptance for their new ideas. It may very well be harder to persuade key decision makers to endorse an idea than it will be to conceive of the idea in the first place. An experienced and astute Counselor can be very valuable in this effort.

Validation

Once a strong concept (in the form of invention, discovery, or licensing/acquisition possibility) has been developed and advanced, leadership roles shift. This phase can produce a bit of schizophrenia in leaders, as they must iteratively traverse between strong advocate and hard-nosed evaluator.

• Critic: In this role, the leader provides an honest, constructive assessment of the concept or plan. Creative ideas are very frag-

ile; care is required so as to not kill a promising idea. Likewise, the enthusiasm of teams at this point generally runs high, and discouragement or cynicism can set in if team efforts are summarily quashed. Yet, for a concept to make it to implementation and launch, it must pass realistic tests of viability and desirability. Leaders serve their teams well by constructively criticizing the work and offering sugges-

Innovation must be purposeful; yet it is noteworthy that many organizations do not have explicit innovation strategies.

tions for improvement.

• **Agent or Advocate:** Minimally, the sponsoring leader(s) must get the concept or team on the agenda of key decision makers. Sometimes this may be a matter of getting the team into formal stage-gate processes, but it could be that first efforts are directed at enrolling influential others in support of the idea. One of the chief functions served by the leader here is building support among his/her colleagues. The experienced and politically astute leader will also prepare the team for the challenges of presenting the idea publicly and to senior personnel. Informally and formally, the leader promotes the concept, works for a fair hearing and review of the suggestion, and ensures that the idea or team is not inappropriately buffeted by organizational politics.

• **Advisor:** This is an extension of the Guide role, but with a bit of a shift in emphasis. As much as experience allowed, the Guide offered advice as to how to handle the substance of the innovation. But in the validation phase, there is a shift to the business of innovation. This phase may take an extended period of time, and the Advisor aids the effort by steering the innovators through the internal organizational maze: filing invention disclosures, developing a business case, composing a budget, and so forth.

• **Expeditor:** In a world in which days, if not hours, make a competitive difference, it falls to innovation leaders to facilitate and streamline the validation process to ensure that good ideas are advanced as rapidly as prudent decision thinking permits. Bureaucracy must be pushed aside and red tape cut away in order for key decision makers to hear and make a decision as quickly as possible on ideas of high promise. The Expeditor ensures that concepts are refined,

proposals are polished, and presentations to decision makers are scheduled as quickly as practicable. Additionally, the Expeditor works hard to ensure that decision bottlenecks do not occur.[11] And beyond efforts on behalf of any particular project, the Expeditor works for constant improvement and streamlining of the validation process in general in order to keep the company competitive.

• **Judge:** There comes a time when, as best they can, organizational leaders have to assume an attitude of objectivity. There is where the "schizophrenia" may come in, as leaders who may have been sponsoring the team's efforts must now psychologically distance themselves from the team in order to make a critical decision about whether or not to proceed. In situations of limited resources, not all good ideas can go forward (and bad ones surely should not);
fiscal responsibility must be shouldered. Leaders must decide whether or not the concept should move forward and more resources should be allocated. Additionally, leaders, as Judges, should act as the organizational conscience, standing firm with regard to standards of quality, safety, environmental impact, and so forth.

Development and Refinement

For those ideas that survive the validation phase, the hard work of turning the promising concept into a viable innovation begins. Additional creative thinking must be brought to bear in order to fully develop and polish the idea. Meanwhile, running in parallel (and hopefully in coordination), strong business processes must be ramped up.

• **Champion:** Often, an idea may begin to move forward, but still not have complete organizational buy-in. In the Darwinian world of innovation, the Champion keeps organizational interest alive, especially with regard to promising ideas that are not yet widely supported. The Champion negotiates for the resources needed to move the idea to fruition; and, if a good idea is temporarily put on the back shelf for some reason, the champion works to move it forward when appropriate. Experience has shown that even a very strong idea (e.g., 3M's PostIt Notes®) will not advance in our larger modern corporations unless it has a Champion.

• **Provider:** It is often the case that considerably more resources are required to develop an idea than were necessary for invention or discovery. Great cross-functional coordination is necessary, and strong project management is key. The Provider acquires and/or allocates the additional resources needed for this phase. Importantly, the Provider ensures that a highly qualified project manager is appointed to bring the concept to fruition and launch.

• **Optimizer:** At this point, the company has a good idea, but now it has to be a great idea. The Optimizer works with the action team to maximize benefits while minimizing costs or disadvantages of the product or service. This is a hands-on role, because here the leader can directly bring experience and expertise to bear. The Optimizer provides constructive criticism to enhance and extend the potential of the idea in order to best meet customer needs. At the same time, the Optimizer often has to fight a defensive battle to ensure that the potential of a great idea is not diluted by organizational narrow-mindedness or lackluster support.

• **(Market) Strategist:** The function of a Strategist is not just one of planning. This role is crucial to producing a highly successful innovation. The Strategist uses prototypes and pilot programs to quickly involve the customer in order to further test, reshape, and refine the idea. The Strategist also scans and analyzes the area of implementation or commercialization so as to position and time the product or service for maximum impact. After doing so, the Strategist works to develop launch plans, align necessary resources, and plot implementation task and time schedules.

Implementation or Commercialization

This is the phase of fulfillment in which the creative idea becomes an innovation reality. The new product, service, or process is officially launched or implemented. Leadership must direct efforts to fully exploit the innovation's current potential while simultaneously focusing on the present and the future.

• **Director:** The innovation leader coordinates and manages all implementation efforts, ensuring that all tasks are completed, timelines met, requirements fulfilled, certifications acquired, and so forth. This phase may very well require quick, intuitive decision-making as plans may suddenly go awry and competitors may take aggressive counteractions. Even with all the effort and resources

invested to this point, the success of the initiative may hinge substantially on the leadership behaviors associated with this role.

• ***Ambassador:*** If the Champion supports ideas that are still struggling for acceptance or implementation, the Ambassador is the representative of products or services that are in place. The leader in this role provides liaison and representation internally and externally to help tell the story of the product or service. The innovation's Ambassador works to educate others to the (corporate) benefits and to enlist greater support and more resources in order to best exploit the innovation's potential. The Ambassador also paves the way for the growth and extension of the innovation to include the development of line extensions and adjacent products or services.

Summary

In considering the range and significance of these roles of innovation leaders, it becomes abundantly clear that leadership is very important to innovation efforts. At both the operational and strategic levels, leaders must shoulder considerable responsibility if an organization is to be truly innovative on an ongoing basis and if individual projects are to be successful. ∎

References

[1.] For those interested in leadership at the tactical or team level, see: Le Storti, A., When You're Asked To Do The Impossible: Principles of Business Teamwork and Leadership from the U.S. Army's Elite Rangers. Guilford, CN: The Lyons Press, 2003, or "The Invention/Discovery Team: Notes from the Field" Current Issues in Technology Management, Vol. 7, No. 4, Fall 2003.

[2.] Amabile, T.M. and Gryskiewicz, S.S., Technical Report 30: Creativity in the R&D Laboratory. Greensboro, NC: Center for Creative Leadership, 1987.

[3.] McGourty, J., Tarshis, L.A., and Dominick, P., Idea Generation & Innovation: A Behavioral Model Based on the Practices of Exemplary Companies. Castle Point on the Hudson, NJ: Stevens Alliance for Technology Management, 1994.

[4.] Kanter, R.M., Kao, J., and Wiersema, F., (Editors). Innovation: Breakthrough Ideas at 3M, DuPont, GE, Pfizer, and Rubbermaid. New York: HarperBusiness, 1997.

[5.] McGourty, Tarshis, Dominick, op. cit.

[6.] Amabile & Gryskiewicz, op. cit. and McGourty, Tarshis, Dominick, op. cit.

[7.] 'Open innovation' and 'technology brokering' are phrases coined respectively in Chesbrough, H., Open Innovation: The New Imperative for Creating and Profiting from Technology. Boston: Harvard Business School Press, 2003, and Hargadon, A., How Breakthroughs Happen: The Surprising Truth About How Companies Innovate, Boston: Harvard Business School Press, 2003.

[8.] McGourty, Tarshis, Dominick, op. cit.

[9.] For a more detailed description of the innovation portfolio, see: Le Storti, "The Invention/Discovery Team," op. cit.

[10.] Hargadon, op. cit.

[11.] Gastwirt, L. "Effective Gatekeeping in New Product Development," SATM Innovation and Technology Management News, Vol. 4, No. 1, Spring 2000, reprinted in Current Issues in Technology Management, Vol. 10, No. 1, Spring 2006.

About the Author:

Anthony J. Le Storti (ajls@ideatects.com) is Executive Consultant for IDEATECTS®, Inc. He directed the Center for Creative Studies at Gwynedd-Mercy College for 17 years, and he has taught graduate courses at LaSalle, Cornell, and Penn. He specializes in creativity and innovation, leadership development, and the dynamics of human systems.
His recent book, *When You're Asked To Do The Impossible: Principles of Business Teamwork and Leadership from the U.S. Army's Elite Rangers* (Lyons Press, 2003), focuses on leaders and teams that take on the toughest challenges.

STEVENS
Institute of Technology