INNOVATION'S CRITICAL WEAK LINK

By Robert Porter Lynch

1. Major Obstacle in the Road to Innovation

   As the race to find solutions to global energy, pollution and warming problems accelerates, there is a little acknowledged, but major hurdle to overcome. It is not a scientific problem in the standard sense of the term; rather it is cultural and organizational. And if it is not addressed, billions of dollars and precious time will have been squandered.

   This problem comes not from a lack of political will, nor a lack of resources, nor insufficient information. Instead, one of the most difficult obstacles will be the nature of the archaic structure of our organizations as move into a rapid-paced world that requires highly networked world.

   Innovation today is not what it was a century or even a generation ago, when the independent inventor or the research and development lab crafted solutions to the problems of the day. What's changed is dramatic, irreversible, and requires major shifts in thinking and operations. New rules and structures, as well as a new style of leadership is necessary.

2. New Rules for a New Order of Innovation

   Fundamentally, the most important differences between past generations of innovation is the nature of innovation itself. In the past, innovation came almost wholly from a single field of study. Chemists solved chemical problems, engineers solved engineering problems, doctors solved medical problems, and so forth.

   However, today solutions come from hybridizing of fields of thought. For example, the genomics project brought together biologists with computer scientists and information technologists. New fields of thinking – such a bio-informatics -- emerged in the intersection between the old fields. This is not just an isolated trend; it is the nature of the future of innovation.

   In addition, innovation is not necessarily technology focused. In fact, much of what is innovation has more today with creating new orders of usage, whether it be putting GPS systems in cars, cameras in phones, or reengineering value chains to enable networks of suppliers to jointly design and produce together.

This is a fundamental shift into integrated and networked systems to connect across both industries and specialized fields of knowledge. Yet the typical organization, coming from a long tradition of being bounded by strong walls of hierarchical control, severely lacks the abilities to form and manage alliances and cross-boundary collaborative innovation. Nor have educational institutions trained adequate human resources who are adept at technical, functional, and organizational integration. This will be one of the greatest challenges to many private companies, governmental institutions, and private-public partnerships. Those few companies with an infrastructure of alliances will be best positioned to benefit. Companies like P&G that have replaced their focus on Research & Development with a "Connect & Develop" approach are leading the way to maximize external sources of innovation.

3. Innovation Comes from Differentials in Thinking

Simply put: "If two people in the same room think alike, one is unnecessary for innovation." All innovation comes from differences in knowledge, perspectives, and experience.

Capturing the value of differentials in thinking will require a dual strategy composed of an unsettling internal tear-down of functional silos while simultaneously opening external castle walls to enable alliances on both ends of the value chain.

This demands the creation of deep cross-functional relationships, building internal trust, and creating a powerful culture of innovation that rewards divergent thinking, inter-connected behavior, and synergistic performance. Further, a company must be willing to take chances, because all innovation means experimentation. In an innovative culture, experiments that don't work are not failures, just learning.

Even more important will be the breaking down of external barriers between customers, channel partners, and suppliers, enabling their collective differentials in thinking trigger innovation. One of the most compelling reasons for alliance formation will be to capture the "synergy of compatible differences" for the purpose of generating continuous flows of innovation.

However, the history of strategic alliances has been checkered. Most companies use a rough-hewn transactional approach to their alliance formation and a me-first manner of engagement once the alliance is operational. This has produce poor success, generally yielding a success rate in the 25-30% range. However, the good news is that alliances that engage in

a disciplined use of proven best practices are likely to see successes in the 75-80% range – a far better bet. As of yet, only a few of best companies, such as IBM, Cisco, P&G, and Lilly, treat alliance management as a sacred art.

4. Integration of the Value Chain is Essential
   To produce the new holistic innovation required for rapid compete, companies can no longer see themselves as isolated command and control centers. Instead, they must link with other companies to develop innovations that benefit their customers or creates powerful competitive advantages in terms of speed, integration, and flexibility.

   Suppliers, channel partners, and even competitors can be a well-spring of massive innovation. However, tapping into this innovative potential will be difficult for many companies who have a long history of beating up on their suppliers to squeeze out the last ounce of profit. Some companies have been masterful in making the shift. Toyota and Honda get more than 50% of their innovations from suppliers. P&G has created joint ventures with its competitors to further their need for innovation. IBM Software Solutions joined forces with its ISVs (Independent Software Vendors), VARs (Value Added Resellers), and SIs (Systems Integrators) to enable them to produce new innovations at the site where innovation is most likely to flourish: in the unique environments encountered in a myriad of customer's premises.

5. Leadership is Required
   Often neglected in any massive revolution of this nature is the role of leadership to strategize, organize, and nurture the transformation. Without effective leadership leading the charge, failure is inevitable because corporate resistance to change can be so powerful.

   Innovation is another form of change, and all change creates conflicts as power bases are disrupted, organizational norms reconfigured, and core processes replaced. Successful companies will designate and empower "innovation champions" to establish a truly innovative core culture.

6. Shifts Needed in Legal Thinking
   Legal processes that have long protected intellectual property will need to be replaced by agreements that enhance the continuous flow of jointly developed innovation. In our studies of cross-boundary innovation, archaic protectionist thinking was the number one obstacle to idea flow.

   Just as the establishment less restrictive trade barriers has generated greater wealth for all, so the building of more fluid legal structures for intellectual property is essential. Companies such as IBM and P&G have made great

strides in lowering the legal barriers to jointly developed intellectual property, but this is just a beginning. Far more must be done.

7. Global Centers of Innovation

   Unlike the past century, the economics of innovation will not be driven by the U.S. Instead, burgeoning economies of the Far East, for the first time will also be steering the course. U.S. companies are faced with a choice: be overwhelmed, out-gunned and out-flanked by a wave of innovation and growth that far exceeds anything the world has ever seen from India and China, or join forces, utilizing the ability of alliance formed with best practices to create enormous synergies.

   > Like all great heroes, the ones who emerge victorious are those who know their flaws and limitations. In the coming recovery, U.S. companies will find redemption in their ability to transcend adversity by using the power of others – teams, alliances, and even competitors – to build corporate cultures that have the ability to harness the power of coming innovations.

8. Heroic Journey

   The Age of Innovation has come quite rapidly on the heels of the end of the Age of Industry and the short-lived Age of Information. We are just beginning to understand the nature of the architecture of collaborative innovation across organizational boundaries.

   What makes collaborative innovation so compelling is that it is, on the one hand, a *strategy* which can be used across the value chain – with suppliers, with customers, and within the company – on the other hand, a *process* to manage relationships, productivity, and channel creativity internally. Thus collaborative innovation is eminently scaleable in any company, from the Executive Committee's strategic plan down to the front-line worker delivering products or services daily.

   The faint of heart are not candidates for success; neither are those who think they know the answers. This Age of Innovation will be led by alliance builders who have the ability and faith to architect new bridges across the crevasse of control, forsaking their fear of releasing an iron grip on a narrow scope of intellectual property to attain a far more powerful system of rapid innovation in new ventures lying in now-uncharted fields.