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Warm regards.

A handwritten signature in black ink, appearing to read 'Chetan Tolia', with a stylized flourish at the end.

Chetan Tolia
Director – TMTC



What's Next... Strategic Innovation

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Abstract

Innovation is not well understood in companies. The word innovation alone multiple definitions, depending on a person's role and experience. Through studying and working with companies pursuing leading-edge innovation strategies, the definition is not what is most important. Rather, it is understanding the characteristics of innovation maturity and the level of uncertainty faced by project teams. Leaders need to consider different management practices for product development and higher uncertainty innovation initiatives. The consequences of not making this differentiation are described through academic research insights and three case studies.

Companies that pursue more game-changing strategies have consistently outperformed competitors focused on sustaining existing business areas, due to their ability to reshape markets and industries. However, there are very few companies that have been able to sustain this growth and renewal process over many years.

Why is This So?

Approaches to next generation and new business area innovation are often ad hoc and unsystematic. As people move on, the learning is lost. There is no organizational system in place to capture the learning and develop the competencies as well as establish the leadership principles and managerial practices which are required for sustained success. In addition, companies have repeatedly tried to apply product development approaches to highly uncertain new business opportunities and have consistently failed. There is a high cost associated with this failure – higher return yet riskier opportunities do not make it to market, careers are damaged and companies lose their competitive advantage or even meet their demise.

How does This Happen?

Well-intentioned leaders do not understand why these higher uncertainty types of innovation have to be managed so dramatically differently from product development or, even if they do grasp this fundamental principle, they do not know how to go about it. Leadership development is inevitably required to enable leaders to provide direction under different business paradigms.

Strategic Innovation is the management discipline for higher uncertainty innovation initiatives. Investment in these types of opportunities can create organizational havoc if not implemented effectively. In fact, left unattended, it can seriously harm an organization and set individuals up for failure. Many companies have poured millions of dollars into higher uncertainty investment opportunities that do not succeed. Most of the failure results from the managerial resource and organization processes surrounding the project, rather than an inability to overcome technology hurdles or understand markets. Then, in frustration, firms retreat from these 'speculative' investments.

In viewing these significant potential costs, it appears more prudent to not do this at all than to

do it ineffectively, however, this must be balanced against the long term risks of doing nothing. In the end, most companies discover that the key to success is to do this well by making an investment in innovation competency and capability development.

How does a Company Overcome This Serious Management Dilemma?

Since 1995, Rensselaer Polytechnic Institute (RPI) has conducted an ongoing academic longitudinal study of Fortune 1000 and other companies. The research team has identified seven management challenges that must be overcome and new competencies that companies must have to be successful. These challenges are the foundation of a new management framework that transforms the pursuit of these higher uncertainty opportunities from an unpredictable model to a management discipline and structure that guides companies through the uncertainty to reduce the risk and improve the return of innovation investments. The seven challenges are:

1. Capturing promising, game-changing ideas and converting them from the reservoir of technical or operational knowledge into compelling business opportunities.
2. Managing Incubation projects in a chaotic environment with no pre-determined end point.
3. Learning about unfamiliar markets or creating new markets by using market probes to learn as quickly and inexpensively as possible.
4. Building the business model through a value chain or network experimentation process to uncover the most appropriate market entry strategy.
5. Bridging resource and competency gaps by pursuing a resource acquisition strategy and developing an entrepreneurial mindset.
6. Accelerating the transition from Discovery to Incubation to Acceleration to Operations status by understanding the characteristics of

and expectations associated with transition readiness.

7. Acknowledging the importance of individuals in driving strategic innovation, supported by an innovation focal point.

Very few companies have people in place with the right competencies to carry this out. Companies do not typically train individuals on how to deal with ambiguity, manage multiple dimensions of uncertainty, recognize opportunities, develop business concepts, manage complex stakeholder relationships, engage in market learning and develop other competencies that are unique to the highly uncertain terrain of strategic innovation. Often, companies underestimate what it takes to be successful at commercializing these higher uncertainty projects. Leaders make unreasonable requests of individuals who are not equipped with the necessary skills. Leaders themselves do not know what to do and are secretly hoping that someone will come up with the right solution. When the moment of truth arrives, the individuals invariably do not meet or even understand expectations that were inappropriately set in the first place. Inadvertently, they were set up for failure.

The Case Studies... Which Companies do This Well or Not?

I have learned through my own innovation journey that significant competency and capability development is required to ensure strategic innovation initiatives are successfully implemented in companies. This is a complex and challenging process. Due to the magnitude of the change requirements, this must take place at all levels within the company to ensure everyone understands the expectations and becomes comfortable in their roles. If the CEO does not make strategic innovation a priority, then it will not happen.

Nortel's Missteps

While leading the internal venturing activities at Nortel Networks, our team attempted to establish a complete management system for innovation to

overcome the management challenges cited above, only to lose our strategic relevance. Merger and Acquisition (M&A) activities started to take precedence over what had been Nortel's strong R&D heritage, with its ability to leapfrog generations of technology. At the time, our strategic innovation model was considered leading edge by RPI, Fast Company and the Corporate Strategy Board among others. I left Nortel in 2000 acknowledging that what I valued, which was a balanced internal and external investment strategy for growth, was not shared at the highest levels in the company. Unfortunately, Nortel no longer exists and its patent portfolio alone was sold in 2011 for \$4.5B USD. Furthermore, one of our internal venture spinouts, Bill Me Later™ (aka GoPin), was purchased by eBay in 2008 for \$945M USD, which at the time was greater than Nortel's market capitalization. This was about 10 years after we placed our initial investment.

IBM's and Corning's Successes

On the other hand, a few companies have been successful with their game-changing strategies. IBM has been able to transform itself from a stodgy mainframe computer company to a vibrant technology and consulting company, consistently achieving double digit growth. IBM was only able to achieve this once it understood that business success was not about a process or funding approach to growth but rather a change management approach, referred to as the Emerging Business Opportunities (EBO) system. In addition, it knew that this strategy could only transform the company if led by the CEO, Lou Gerstner at the time. Corning is another company that has focused on its core competence in glass to move from light bulbs to television tubes to durable glass dinnerware to fiber optics, and when that industry imploded, to display technologies such as Gorilla™ glass and the environmentally friendly, Lotus™ glass. After the telecom crash, Corning experienced a near death experience and implemented its Four Rings of Defense to better respond to market cycles. Corning adopted a strategy of consolidating and strength-

ening R&D, with R&D cuts being its last line of defense. Both these companies were part of the RPI research and did not make significant headway in building their management systems for innovation and growth until their CEOs asked why are we missing emerging business opportunities (IBM in 1999) or how do we weather market downturns more effectively and protect our R&D investments (Corning after the crash).

Which company do you want to be – Nortel, a highly successful Canadian company that lost its way, IBM or Corning? It is unfortunate that Nortel did not have the leadership insights of IBM or the R&D mindset of Corning. Perhaps, it would still be around today.

Conclusion

Companies have been successful in utilizing a systematic approach to higher uncertainty innovation. This requires attending to technical, market, resource and organization uncertainties. The latter two are typically not even spoken of, let alone managed. It starts with following the innovation ABCs of admitting you do not have all the answers in this uncertain world; bringing a systematic approach to harness the chaos; and, learning how to be an effective strategic communicator.

About the Author

Ms. Joanne Hyland is the President of the Radical Innovation Group. She works with major corporations to advise them on how to structure and implement strategic innovation initiatives. As a former Vice President at Nortel, Joanne and her team founded its internal venturing program that led to 12 business startups, one of which, Bill Me Later®, was bought by EBay/PayPal for close to \$1B in 2008. Joanne is a guest speaker on topics related to innovation and has global teaching experience. She has held a variety of corporate and startup board roles. She is a graduate of Concordia University in Canada, receiving the Marketing Medal for academic excellence, and is a certified New Product Development Professional (NPDP).

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