

The PARAGON Perspective From the President

PARAGON Perspective is sponsored by PARAGON Development We are not intending, and will not use this communication to promote our business. There are other times and places and opportunities for that.

We hope to inspire debate and pass along information that may enable all of us to better understand and succeed in our new business objectives in the future. Plus, we hope to make you smile and think. We further hope you pass these along to colleagues who may have mutual interests.

We want to use this forum to do the following:

- Share information we have learned that we consider important concerning best practices, trends, successes and failures, conferences, and other elements that will enable all of you to grow your organizations with maximum top and bottom line results.
- Share information about select client initiatives that may be of interest based on technologies, markets, or business needs that you believe could fit within the scope of those client's interests.
- Share personal observations and even humorous items given to us by others.

We welcome your comments on any topic and encourage you to contribute to future newsletters. The PARAGON Perspective is now in its fifth year. We thank everyone for their newsletter contributions and for the ideas and suggestions that have brought recognized improvements and made it easier for us to produce.

This month's newsletter will highlight our opinion on the business development topic: "**Open Innovation and the Role of Modern Universities**". This is part of a series that will be published over the next few newsletters. It is contributed by Peter Lee, Chief Executive Officer of UniServices, which is the commercialization vehicle for the University of Auckland. Our very large thanks to Peter for sharing his insights.

This first installment is an introduction to the concept and drivers for open innovation and future editions will go deeper into this concept and then cover where open innovation is found. This paper is also being presented at the Chemeca conference referenced below.

Also included is a response to last month's newsletter from Bruce Banyai from Novozymes Biologics. Thanks Bruce!

Jack Peregrim
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Paragon Update

This is the ninth installment of 2006 and our 5th year. We are seeing increases in projects in the Chemicals, Material, and Healthcare areas. Many projects have been scheduled for September starts, so it looks like a very busy Fall for the Paragon team. We are also now engaged in equal number of projects inside and outside of the U.S.. This is the first time in our history this has happened. There are several reasons for this including the fact that there are global inventions to commercialize along with the natural growth in our work with global companies which has been steadily increasing for the past few years.

Conferences

This space is reserved for announcements of conferences or events that may have value to our readers. We have resisted posting 'monthly' meetings and have focused on major or National events, but due to the many requests, we will add those in 2006.

LES (Licensing Executives Society)
New York City
September 11-14, 2006

PARAGON highly recommends the LES conference in September for Licensing, Intellectual Property, and Technology Transfer (if it isn't too late). The conference deals with ways to optimize value creation through best practices in protecting and leveraging intellectual property and focuses on best practices in attaining technology developed outside an organization as a means for new growth. It is very reasonably priced and includes many amenities in the overall program. It is always well attended to present networking opportunities and the presentations are very informative and valuable.

For more information and registration visit the website at: www.LES.Org.

We will be presenting a three hour workshop on the Voice-of-Market™ process at the LES conference on September 13 as well as speaking at the September **Chemeca Conference** in Auckland NZ which runs from September 17 through the 21st. Information can be found by searching for Chemeca 2006.

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Technology Transfer/Capabilities

This section is open for clients, friends, and other newsletter recipients to spotlight technologies they have available for licensing, acquisition, development, or could be available to use. Please send a description of your technology to be posted in this section for future newsletters. Inquiries can either be sent directly to those who have posted information, or, we could forward any/all inquiries to you. This section highlights non-client project technologies.

This newsletter has a distribution of several thousand individuals who are primarily in new business development, so the audience has the potential to generate legitimate interest. We do reserve the right to withhold posting any technology closely related to ones in which we have a client conflict.

Technologies Being Sought

University of Auckland:

We have worked with technologies from the University of Auckland and it is very worthwhile to look at their capabilities. In fact, they have made numerous breakthroughs in area in medicine, materials, bio-technology, and agriculture and we have found their accomplishments are much closer to having commercial value than the basic research that most universities produce. They also have a commercial 'arm' that works with business and 'speaks their language'. This company is UniServices. One technology in particular that we have been involved with is a huge breakthrough in muscular skeletal modeling (including skin) with applications in: Surgical planning; Sports medicine; Forensics; Ergonomics; and Animation.

Again, this is only one example of hundreds so those of you looking for new technologies would be well served to check out this 'hidden treasure' of advanced technologies without the visibility of many other institutions with a fraction of the value.

A client is looking for new opportunities in functionalized polymers that are process based. As an example, they can considerably increase the melt index of polyethylene while still maintaining strength and other properties.

If you have, or know of, any potential technologies or products for this client, please, send us your information. We will forward it to the client so they can contact you directly. Please send the information to:

Jack Peregrim @ (203) 288-4154 or peregrim@paragondevelopment.com

Quotes of the Month

"Success is going from failure to failure without loss of enthusiasm." *Winston Churchill*

"Only two things are infinite; the universe and human stupidity. And I'm not sure about the former." *Albert Einstein*

"I criticize by creation; not by finding fault." *Cicero*

"Opportunities multiply as they are seized." *Sun Tzu*

“When I am working on a problem, I never think about beauty. I only think about how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong.” *Buckminster Fuller*

“Excess on occasion is exhilarating. It prevents moderation from acquiring the deadening effect of habit.” *W. Somerset Maugham*

“In theory there is no difference between theory and practice. But, in practice there is.” *Jan L. A. van de Snepscheut*

“Opportunity is missed by most people because it is dressed in overalls and looks like work.” *Thomas Edison*

“Experience is the name everyone gives to their mistakes.” *Oscar Wilde*

“The possibilities are numerous once we decide to act and not react.” *Gloria Anzaldua*

Web Site Additions

Our website has been updated but we will continue to add to our alliances and partnerships page. It provides sourcing to our clients on services they may be seeking in specialized functional or industry areas. As such, we will post organizations and individuals who we know to excel in products and services.

If you would like to be included in this listing, free of charge, please submit a request to us with a short (50 word) description of your products and services, as well as direct contact information. We view this as a mutual service to our clients as well as companies, consultants, and other entities we have had the pleasure to work with.

We encourage readers to review the organizations and individuals on the website as they are limited to those people we have personally qualified. This is also a service we offer without any compensation as our intention is to serve as a catalyst for success in a broad way that extends beyond those areas where we are best in kind.

Interesting Words

Exiguous: (ig-ZIG-yoo-uhs) Adjective

Scanty; small; slender.

Chaffer: (CHAF-uhr) Verb

1. To haggle; to bargain.
2. To bandy words; to chatter.

Hermeneutic: (hur-muh-NOO-tik) Adjective

Interpretive or explanatory.

Ensorescell: (en-SOR-suhl) Verb

1. To bewitch.
 2. To enchant.
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“Open Innovation and the Role of Modern Universities”

Part one
By Peter Lee

Abstract

Companies are increasingly seeking to invigorate their products and services with external innovation and will look anywhere in the world with little regard to cost to find the best and brightest new ideas. The globalization of research and the almost frictionless transfer of information have made this increasingly feasible. The phenomenon has been termed open innovation. At the same time, modern universities are increasingly striving to link their inherent research capabilities to commercial outcomes. Companies seeking open innovation and modern universities are rapidly forging new linkages and finding ways to collaborate such that the fundamental insights of researchers at the cutting edge of their field can be aligned with the need for innovative new products and services.

This article analyzes the convergence of motivations for open innovation from the perspective of innovative companies and modern universities. Practices that are emerging to satisfy the need for collaboration between these natural partners in this rapidly developing field are presented along with examples to illustrate their effectiveness.

Introduction

Successful companies come and go. Product lifecycles and the tenure of businesses and industries are becoming shorter as the pace of technology development increases. Why have companies not been able to adapt to these changes instead of becoming extinct? The phenomenon has been analysed by James Utterback in his book *Mastering the Dynamics of Innovation* (1), who concludes that most companies become victims of their own success by becoming wedded to their winning ways well beyond their useful life. These winning ways, which are often represented by investments in infrastructure, management processes and personnel, create inertia to change. An “asset management” mindset locks in evolutionary thinking and excludes revolutionary ideas. However, change external to the enterprise is inevitable and large established companies and industries are vulnerable to smaller and more flexible upstarts which are not as encumbered by this infrastructure. They thrive on the same changes which threaten the incumbents. The following illustration, Figure 1, shows the performance of an existing product and a new competitive offering in the form of two business S-curves, one for an existing product, the “Incumbent”, and one for a new product, the “Successor”. There is a period when both products coexist as the successor prepares to take over the incumbent.

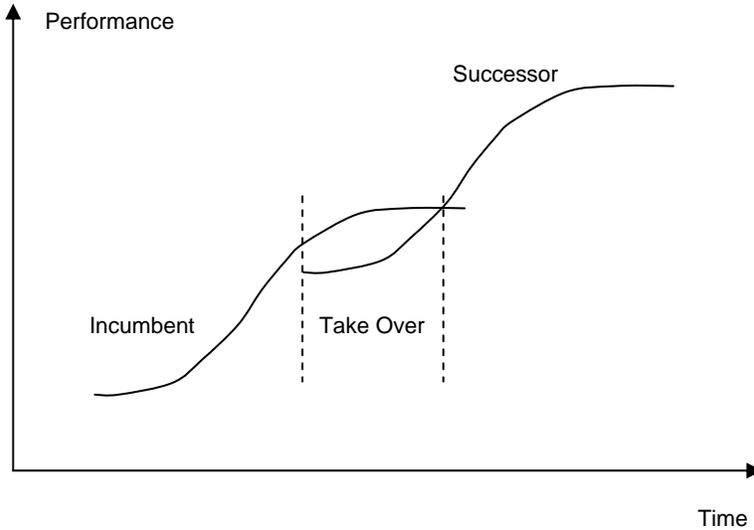


Figure 1: Performance versus Time of two hypothetical products, illustrating a period of “Take Over” between an incumbent and its successor.

Early in the life of the successor it cannot displace the incumbent with all of its established efficiencies. The successor is forced to exist in various niche markets, where it competes with other potential successors in a Darwinian type of struggle for survival. Eventually, the dominant form emerges and grows. Sometimes, the emerging threat is noticed by the incumbent, who responds in the ways it knows best by incrementally improving cost and performance of the existing product. However, the incremental improvements generally cannot match the large gains in efficiency which come relatively easily to the successor early in its life. Maturity of the incumbent is followed by death.

For example, the paper industry for many years enjoyed growth in the use of copy paper in the office. The growth followed the proliferation of personal computers and desk top printers. The U.S.A. led this phenomenon by consuming per capita many times the amount of office paper compared to other developed and developing nations. Paper companies extrapolated the U.S.A. experience onto global demand and relished the prospect of continued growth. Many companies responded by separately investing several hundreds of millions of dollars on new production capacity to match the projected demand. Unfortunately, they largely missed the impact of Moore's Law on the cost of electronic transfer, manipulation and storage of information. Rather than follow the U.S.A., other countries largely leapfrogged the growth in the consumption of office paper exhibited by the U.S.A. by quickly adopting the increasingly more cost effective electronic communication and storage of information. The paper industry responded by shutting down its most costly production capacity. However, one paper company, International Paper, had a group dedicated to scanning for new technologies and evaluating the potential impacts on their consumers, customers, competitors and their own ability to respond. The process was termed Voice of Technology and is described by Bruce Lyne, then Chief Scientist at International Paper Company (2). The company had earlier decided to join the Media Lab at MIT, which had at the time a research focus on electronic content and media, in order to not only track significant trends and developments, but also explore emerging business opportunities with other companies with similar interests. The Voice of Technology process identified the early stages of growth of personal printers in the home and the early developments of digital photography. The company negotiated cooperative developments with several manufacturers of personal printers to provide a combination of paper and printers that would provide an alternative to expensive photographic printing based upon

silver halide chemistry. The technical challenges were large but success in overcoming these resulted in otherwise surplus manufacturing capacity being converted into the production of this next generation of papers for producing high fidelity graphical images from personal computers. In other words, an awareness of significant trends and developments in their markets and the corporate will to respond meant that this company was agile enough to step from one growth curve to another.

As always:

We address many topics and most are at the request of readers, clients, and other business colleagues as this one was.

We hope that this perspective has stimulated thoughts and helps improve your future returns. It has been our intent to pass along things we have learned or experienced on topics involving growth and new business development. Particularly ones that may be provocative or be beyond those considered every day. We do not try to presume to be the leaders in all areas we cover and we invite others to contribute with comments, additions, or criticisms. We encourage feedback in any media and will post your contribution in a future newsletter if you allow it.

We also will continue to focus on topics that the readers choose in almost all cases over ones we consider within our staff so please continue to send requests for topics that you want to have covered.

Response to last month's newsletter:

Jack,

Thanks for your most recent newsletter. I always value your perspectives and updates.

A personal note on the "Invest proportionate to Importance" . This aspect is often overlooked strategically when project cost estimates of outside work in CD/BusDev opportunity assessments are being estimated: i.e. "that job can be done for \$X", when as you stated if they considered the impact of the needed decision that they should have spent "\$XX". Again, consider what and when you need the required information: it may take longer or be harder to get the truly relevant information or services.

What you highlighted at the end of the article is of far greater consequence today than before, in my recent experience of successful CD: they have lost 6 months of time and opportunity

What needs to be reminded is that delay CANNOT be made up when the project is time-sensitive, and may be the biggest factor in project success or failure. This has been especially true when the market is in the defining stage and becoming the leader means you get all the marbles.

Regards, Bruce Banyai

Trivia:

Why do joints crack?

When you stretch a joint by pressing down on your knuckles or twisting your spine, you cause small air bubbles that form between the sacs in the joints to pop. These sacs, called bursas, help cushion the spaces between the bones and keep them lubricated. As creepy as the sound can be, cracking is usually harmless and has no effect on the bursas. Despite what your mother told you, cracking your knuckles or ankles or knees or any other joint does not cause arthritis. But, it doesn't do your knuckles any good either. Any feel-good benefit people claim from joint cracking is purely psychological.

We hope you learned something from this and/or stimulated an action that leads to new opportunities for you and your organizations.

Previous issues of our newsletters can be found at <http://www.paragondevelopment.com/perspective.html>.

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Mission:

To ensure that our clients make decisions that optimizes their growth and measurable value creation. We will do this with unequaled effort and efficiency.

Background:

PARAGON employees and affiliated industry partners are dedicated to helping clients optimize their planning and development efforts. We bring a network of external industry experts who provide objective information and insight into critical areas affecting our client's success potential. In addition to our own experience base and the external access to knowledge, we utilize a decision making process that combines best practices such as Voice-of-Market™; Stage-Gate; and Discovery Based Learning. Very simply stated, we combine efficient processes with the information necessary to ensure that commitments are made with solid, objective knowledge. We allow planning and development from the 'outside in' that compliments internal efforts.

We are not industry specialists. The experts from our PARAGON Network™ provide the specific knowledge in their fields while PARAGON brings process and functional experience that generates and interprets the relevant information.

Focus:

Our client assignments are broken into three main areas:

1. Retainer agreements in which we offer discounted plan with minimum thresholds for numbers of Forums or phases. They are exemplified by clients who may write us into their R&D or new product development processes in which a PARAGON Forum is required as a part of a gate approval.
2. Evaluation and monetization of assets such as technologies, operational capacities, or new product extensions. PARAGON's support is particularly valuable when the potential is unknown but falls outside core markets or industries.
3. Support in strategic planning and strategic expansion into non-core business areas. The deliverables are typically in the form of a strategic commitment into new platforms.

Mechanics:

The steps employed are a combination of internal (client) and external events. The internal events include:

- Setting criteria for the project.
- Examining the internal knowledge base.
- Setting scope and charter issues.
- Determine specific outputs required for overall success.

External events are:

- PARAGON Forums that have 6-8 external experts who bring distinct but complementary knowledge about markets, industries, trends, competition, channels, downstream value, and function excellence that is specific to the assignment. These are typically day long events that have been referred to as "Super Focus Groups" with the client involved in the planning and then viewing the group and providing guidance and direction throughout the day. All this without the outside experts knowing whom the client is and they are thus unbiased, creative, and provide different perspectives than our client has because of their 'inside-out' viewpoints.
- Surveys and interviews with people from our PARAGON Network™ that generate very targeted information that our clients require.

We hope that you have enjoyed the issues of *The* Paragon Perspective that you have received and will let others who might find this newsletter useful know about our publication. To provide us with profile changes; or to let us know about other individual interested in receiving our newsletter; or for other information just click on this link <http://www.paragondevelopment.com/contact.html> (or copy and past this shortcut) and complete the Contact/Request for Information form (be certain to include your email address) or you may simply reply to this email and provide us with (or ask us) the information.

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