



MARKETING FOR VALUE™

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I. EDITOR'S REMARKS

It's no surprise to most of our readers that the convergence of science, automation and information technology is creating one of the most significant investment and career opportunities of the century. Once every few issues, MARKETING FOR VALUE will focus on this growing business sector representing the movement of biology to an information science (a growing industry that also includes about 100 companies in the San Francisco Bay Area). In this issue in which we share additional value-based marketing practices—this time from the biotech, pre-customer perspective--we illustrate the importance of marketing and especially product marketing and licensing deals, in the pre-product stage. First, the journalist Peggy King offers a rare interview with Dr. Evan Unger, President and CEO of ImaRX, a biotech company that develops sophisticated proprietary drug and gene delivery technologies, on how Dr. Unger was able to create value for shareholders throughout the product development stages. Then, Lorie Loe, a technology copywriter, who has toggled between the universes of high-tech and biotech, shares insights with you on marketing's role in biotech.

Enjoy!

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II. ENTREPRENEUR SPOTLIGHT: "Dr. Evan Unger Founder and CEO of ImaRx on Creating Shareholder Value for Intellectual Property -- Sell Off a Little and Make the Most of What's Left"

Interview by Peggy King

"The traditional model of an acquisition is 'We sold it and we're out of the picture,'" explains Evan Unger, the founder and CEO of ImaRx Pharmaceutical Corporation in 1990 and of ImaRx Therapeutics Inc. in 2000. Unger, who is also an M.D., radiology researcher, and inventor, starts companies with the goal of creating maximum value for shareholders. And he walks his talk . . . Dupont Pharmaceuticals Company acquired the right to the diagnostic imaging products of ImaRx Pharmaceutical for \$40 million in October 1999, creating a 25X return on shareholder's investment.

Unger's advice to early-stage biotechnology companies that need to raise capital is to build value through licensing deals rather than focus in the short run on pursuing an IPO or an early acquisition by a big pharma company. Instead, he advocates that companies create value by negotiating favorable licensing terms for some of their products under development. The products must have intellectual property (IP) behind them. When Unger negotiates a deal with a partner, he tries to limit the scope of the license and retain rights to the future FDA-approved uses (known as indications) of a product and as much IP as possible. "The more technologies that a company has developed and the bigger its collection of patents, the more licensing options it has," he says.

One way for early stage biotech companies to raise capital is to pursue licensing agreements with pharmaceutical companies seeking scientific breakthroughs that can serve as a basis for new therapeutic and diagnostic products. Medical device companies also need new IP as a technological basis for creating or improving the consumables used with their devices. In the United States these agreements usually include royalty payments and milestone payments as companies go through the steps to obtaining FDA approval for beginning human studies on a new drug or drug delivery method (these are known as clinical trials).

According to Unger, every deal is different, and deal terms will in part reflect how far along a product is when entering into the licensing deal. There is always a trade-off between licensing at an earlier stage and holding back for greater future royalties for future products. A compromise position can be to license out for one indication and then retain the other indications so that they can be licensed at a later stage. Some benefits of early licensing are that large milestones and royalties much higher than ten percent of sales may help a Pharma partner decide whether to acquire one's company or purchase the product. But the flip side is that it is hard to get high royalties unless that product is well along in clinical trials.

When it does become necessary to sell IP rights to raise the capital needed to continue research, Unger prefers to sell diagnostic rather than therapeutic rights as he did when DuPont Pharmaceuticals acquired the diagnostic rights to a key technology developed by ImaRx. ImaRx Pharmaceutical Corporation then ceased to exist and the new company, ImaRx Therapeutics, retained full rights to exploit the commercial potential of developing therapeutic applications for that same technology. "Therapeutic rights are better sources of capital than diagnostic rights because patients typically require only one or two doses during diagnosis but those who need treatment will require repeated doses over the course of an illness or for the rest of their lives. Also therapeutic products are often reimbursed at a higher rate than diagnostic ones," Unger explains.

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ImaRx is presently a company with 19 employees, 12 of whom are involved in product development. At this early stage, no director of marketing is on board yet and ImaRx faces the same marketing challenges many other early stage biotech companies confront when they negotiate with larger, better known companies: How to position their company to the technical and business people at the other end of deals so that the startup is perceived as a hotbed of technology worth licensing or acquiring at terms more favorable than those that big companies usually extend to emerging enterprises.

About the Author:

Peggy King, a technology journalist located in the San Francisco Bay Area, has over 17 years of technical and business writing experience, and has spent the last 10 years writing for leading computer trade publications. Since 1995, she has occasionally conducted press training sessions for executives and entrepreneurs at technology companies. Peggy can be reached at peggyking@aol.com.

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III. FEATURE ARTICLE: "Driving Biotechnology Product Development Through Marketing"

by Lorie Loe

Similar to pharmaceutical, biotechnology is an extremely risky business. In pharmaceutical, only 3 in 10 approved drugs ever recoup their costs; similarly, only about 3 in 10 medical devices, recombinant DNA and other biotech companies ever return an investment to their shareholders.

Are there ways for marketers and investors to mitigate that risk? Yes. Ensure that marketing is involved throughout the product development process.

According to Audrey Erbes, principal of Erbes & Associates, "Biotech is very much a market-driven industry. Products need to meet market demands, be affordable, and be developed on a timely basis."

Erbes's views, hard-won over more than 25 years in worldwide marketing and business development in the biotech and healthcare industry for companies such as Syntex Corporation (now Roche), fly in the face of standard practice. "Many biotech companies are started by entrepreneur scientists who come from academia and think that marketing is a post-development function and limited to selling the product after FDA approval," Erbes says. "But marketing needs to be incorporated into the entire product lifecycle from initial market research (to assess a product's marketing viability) to ongoing strategic planning (through clinical trials and distribution)."

What follows are the 7 keys to how marketing can help successfully steer biotechnology companies through the lengthy biotech product development process.

1. The first key is for marketing to conduct thorough market research

Since many scientists develop products for purely scientific reasons, a thorough market assessment is required to determine whether a market exists for the product and, if so, to determine market size. Such an assessment ensures that biotech companies develop a credible story about expected revenue streams, which are necessary to line up investors.

2. The second key is for marketing to incorporate a system for ongoing strategic planning

Yes, I said ongoing. Strategic planning needs to be implemented for each critical phase of biotech products because it can take from five to twelve years to bring a biotech product to market. If conditions change and the product is no longer viable, it is better to pull the plug during Phase 1 clinical trials than after the more costly Phase 3.

3. The third key is to get marketing involved in the clinical trials

Legally, biotech manufacturers can only make marketing claims that have been proven through scientific and clinical research. By involving marketing during clinical trials, a biotech company has the opportunity to substantiate differentiating claims. For example, when Parke-Davis developed Lipitor, five similar products were already available. However, during market research, Parke-Davis learned that doctors don't like to titrate (adjust the dosage by trial and error for individual patients)—they want an effective standard starting dosage. Parke-Davis met that demand and Lipitor succeeded despite the crowded market.

Standard marketing messages worldwide are critical today because customers can access product information from anywhere through the Internet. Marketing involvement during clinical trials also helps ensure that biotech companies have the necessary documentation to plan in advance for an international rollout and meet international regulatory requirements to enable consistent marketing.

4. Ensuring that marketers are involved with production planning is the fourth key.

Because it takes years to build manufacturing facilities for biotech products, market research and demand planning are critical. Products that undergo controlled distribution due to inadequate manufacturing capacity risk losing out to competitors who can keep up with demand; therefore, marketers need to work closely with sales and operations on the distribution channel strategy.

5. The fifth key is for marketing to include a well-constructed partner marketing strategy in your strategic planning.

Many biotech companies need to share costs through joint clinical development and marketing. Marketing needs to identify suitable partners and approach them in a credible manner.

6. The sixth key is for marketing to outline distribution channels that align with the information discovered in the market research and clinical trials.

Distribution or sales channels, another critical marketing function, must also be determined in advance in biotechnology. An example demonstrates why: Immunex brought out the

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arthritis drug Embrel as a product that can be self-injected by the patient. Because of previous practices in reimbursement, however, many insurance companies refused to cover Embrel, effectively limiting its market to wealthy people with arthritis. With better market research, Immunex would have learned that it's easier to obtain insurance reimbursement for expensive drugs if they are infused (given by a doctor).

7. The last key is marketing communications

Clearly marketing must communicate product messages through public relations, investor relations, product collateral, and sales training and materials. But the design and writing of these materials is not easy and requires expertise. In fact, because of the highly specialized design work needed for method-of-action animations, the medical and technical language skills required for expert copy, and the regulatory issues surrounding any given biotech product, the only way these communications can be truly accurate and effective is if marketing has been involved in shaping and substantiating the messages throughout the entire product development process.

About the Author:

Lorie Loe is president of Lorie Loe & Associates, a provider of premier copywriting services for print, Web and digital content. A former director of marketing and communications for a biotech company, Lorie provides copy for both high-tech and biotech organizations.

BoldFocus is a full-service Internet solutions company that develops corporate web sites (extranets, portals) and provides a suite of online marketing campaign and content management solutions. Since 1995, BoldFocus has provided Internet solutions for many prominent companies including Broadcom, Honeywell, KLA-Tencor, MarketFirst, PeopleSoft, Xilinx, and many other B2B and B2C corporations. To experience their showcase of digital solutions, visit www.boldfocus.com/clients/clients.html.

IV. FEEDBACK

We want to hear from you. If you'd like to know more about value-based marketing or if you know of companies applying value-based marketing ideologies to improve profitability and customer satisfaction, drop us a line at (415) 218-6041.

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V. THIS MONTH'S RECOMMENDED MARKETING BOOK AND LINK

Book Recommendation: Walker, Boyd, and Larreche, Marketing Strategy: Planning and Implementation (1999) (used as text for a recent Stanford class, the work is an excellent resource; it covers the growing inclusion of financial measures in marketing and is written from a cross-industry perspective)

Marketing Link: www.marketingpower.com (The American Marketing Association's recently launched official site offers a plethora of useful tools and resources to marketers)

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