

THE PJA ENABLING TECHNOLOGY SERIES

# lessons from the leading edge

five marketing insights for emerging technology companies

by Hugh Kennedy, Director, Planning

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Since 1988, PJA has specialized in marketing and advertising programs that help technology and life science companies become essential in the minds of their prospects, customers, and industries.

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## executive summary

Emerging technologies — products and applications that are two to ten years away from realizing their potential among a widespread buying audience — have the potential to fuel economic growth and provide forward-thinking organizations with the assets they need to build competitive advantage. A quick scan of venture capital sites confirms that emerging technologies are some of the most exciting and interesting businesses out there.

But how can technologies that aren't yet proven, or don't enjoy a large user audience, present a compelling story to early adopters and convince them that the potential rewards outweigh the risks, even if the ultimate payback is years away?

In a company with more algorithms than products, marketing may rank low on the list of obvious success factors. But think about it: the aspiration of any technology is to become a brand. Brands separate the no-names from the products that command premium prices. And a great brand is primarily a great story — one that your partners, investors, and supporters must hear, believe, and retell to help your emerging technology onto the stage. So, how do you tell one story and move forward?

## executive summary

As a marketing firm focused on leading-edge technologies that play a critical role in larger end-user solutions, PJA Advertising and Marketing wanted a better answer to this question. We wanted to know what appealed to today's select audience of emerging technology buyers, an audience spread among universities and governments as well as the Fortune 500®. Our goal was to uncover their criteria for making buying decisions, and offer some insights to marketing professionals in technology companies further down the supply chain about what really matters in the way a product or service is presented. As it happens, the differences in marketing imperatives between emerging and existing technologies are often striking, but the commonalities are universal enough to be of value to anyone in the B2B technology space.

To gather our information, PJA and Technology Review, Inc. recently co-sponsored a roundtable as part of the Emerging Technologies Conference at MIT. The 14 invited participants held senior titles in aerospace, retail systems, power generation, higher education, banking, forest products, instrumentation, information systems and consumer products.

What follows are the top five insights we identified from the roundtable, and some marketing lessons that should have merit for any good marketer. We hope they will prove useful to practitioners and managers — Chief Marketing Officers, Senior Vice Presidents of Marketing, and Vice Presidents of Marketing — in companies selling new technology products or services to sophisticated audiences.

Note: although not attributed, all quotations in this report are from roundtable participants.

A complete list of participants can be found at the end of the document.

## five category insights

### 1 Acknowledge your technology's status as a disruptive force

The words that buyers use when considering emerging technologies point to their potential impact within organizations: revolutionary, experimental, and destructive. In short, emerging technologies are far from business as usual. Where established and enabling technologies fit into current business models, emerging technologies are often marketed to leapfrog current approaches; even to “undermine one of our profit sanctuaries.” Marketing new technologies, then, requires tools that internal champions can use to sell a new way of working, not just an improvement on an old way. Even technologies that help to do “old things in new ways,” such as remote diagnostics or online billing, require a process change that smart marketers would do well to acknowledge. The lesson applies across the technology space: You need to present a powerful case. Whether you're marketing a breakthrough non-invasive blood testing product or a revolutionary Web search tool, you'll need to appeal to multiple buyers with communications that target their specific pain points, sell the value of the technology, and make it clear that the disruption ultimately will be worth the dramatic gains.

#### **Voice of the technology buyer:**

*“If it's an established technology, we want it to fit clearly within the organization. Whereas, if it's an emerging technology, something that you're going to experiment with, you want it to do new things for the business.”*

## five category insights

# 2 Be ruthless (and candid) in describing your technology breakthrough

The CXOs in our roundtable (as well as recent research) point out that one of the most basic lessons of marketing — highlight your differentiation — is still lost on many emerging technology vendors. In attempting to fit in, and in their failure to regularly survey the competitive landscape, these companies become what one executive called “pile-on emerging technologies,” never articulating value beyond a feature set. Buyers looking to lock up and generate value should see candid messages repeated consistently — and presented with a clear sense of their high value. The emerging technology space is littered with companies that were beaten not by a better product, but by better marketing of a comparable product.

### Voice of the technology buyer:

*“Not having proprietary differentiation adds no value to my business. In many cases, I can buy the equivalent part from 12 different sources or license it from 12 different sources. Those companies are, quite frankly, not of that much interest to me.”*

## five category insights

### 3 Be expansive and non-parochial in describing your technology's breakthrough impact

As more technologies result from the merging of different product disciplines and even maturity levels within disciplines, technology marketers bear an ever-greater responsibility to be clear and empower buyers with knowledge. Because emerging technologies do not necessarily represent a linear progression within a specific discipline, buyers of emerging technologies are becoming more knowledgeable in a wider range of developments. As a result of this information explosion, the opportunity exists to build thought leadership: helping buyers think not just about your product, but also the impact your technology will have on a manufacturing process or in delivering functionality. Especially valuable is information that points to how your category — and your products — builds upon industry standards.

#### **Voice of the technology buyer:**

*“I don't know any of the technologies in detail, but I know some things about all of them. And I believe it'll be information integration as well as integrating the technologies with each other as they come out, that will create competitive advantage.”*

## five category insights

# 4 Traditional technology buyers don't buy emerging technologies

When looking for approval on an emerging technology in their organizations, technology buyers must often obtain support from colleagues, including the president and the CFO, and sell in the solution over months or years before its benefits are fully realized. Emerging technologies differ on when they are expected to become profitable. Depending on the nature of the technology and the dynamics of the market, expected ROI can vary from as short as six months to over a decade.

Therefore, marketing programs must be built to appeal to audiences at multiple levels within organizations and do so throughout the life of the project. That means a carefully planned and integrated program of print, direct, e-marketing, seminars, and Web content that, taken together, sell and re-sell your technology's benefits as market dynamics shift.

One important point is that the CIO's criteria for buying a technology (fast ROI, risk mitigation) couldn't be more different from that of a VP of Strategic Technology or Director of Advanced Technology. In fact, with the CIO audience, the more an emerging technology is presented as emerging, the less interesting it will be. IT departments tend to play a support role rather than a central one in the early adoption of emerging technologies, so directing a program primarily at the CIO will miss the mark.

### Voice of the technology buyer:

*"You need very high level buy-in. Also, you have to keep selling your technology, because in a company like ours in a ten-year period, it's not uncommon that we'll have three rotations of leadership. So the program needs to be kept alive for the right reasons.... In the aerospace world, you're looking at least five years from the time of the start of development to the time you recoup your investment."*

## five category insights

# 5 Effective marketing includes partners, but not the ones you may expect

The partner universe is different for emerging technologies. VC firms, technology consortiums, even strategic acquisition groups within customer organizations need to be both sold on the technology and invited to participate in product definition. In many cases, emerging technology companies must open up algorithms and source code to partners who will in turn spread their message. Marketing programs, therefore, should respond with value propositions that acknowledge all possible forms of alignment.

Buyer's Criteria: Emerging versus Established Technologies	
Emerging	Established
High risk, high reward	Risk mitigation, expected reward
Competitive advantage	Competitive parity
ROI: 2 to 10 years	ROI: 6 months to 2 years
<i>Partner network:</i> development VC, consortia, customer R&D groups	<i>Partner network:</i> sales-oriented systems integrators, distributors, platform partners
<i>Primary buyer:</i> R&D, strategic technology directors	<i>Primary buyer:</i> IT with CFO

### Voice of the technology buyer:

*“We look for emerging technology companies with complementary strengths, and often partner a stronger firm with a smaller company. Ideally we want someone who has been through the development process, so we can create programs that combine strengths. A lot of the seed comes from these small companies with great ideas, and by partnering two companies together, you’re not spending 10% innovating and 90% trying to create the organization.”*

## five marketing strategies

Buyers of emerging technologies had no problem identifying criteria that make their decisions easier. Although some are antithetical to traditional technology marketing practices, there are lessons here for any B2B professional looking to break through the clutter.

**Address risk.** The subject of risk and possible pitfalls with your technology must be addressed honestly and thoughtfully, from total cost of ownership to multi-layer security. Be honest in the assessment of risk and demonstrate a roadmap to help mitigate it.

**Be candid.** Candidness in marketing goes a long way. It opens a productive dialogue, whether discussing realistic implementation timelines, the maturity of your product development, or your reasons to why it will be difficult for a competitor to replicate what you do.

**Know your value.** Draft and update a clear statement of the need your technology is fulfilling, the benefits to users and society, and how your approach to development has maximized benefits.

**Know your competitors (past and future).** Emerging technology vendors must compete with old and new technologies. Before winning the battle against other new technologies and becoming the new standard, it's often necessary to displace the current one.

**Have vision.** Back up the promise that you're the Next Big Thing in your category rather than a me-too player. Don't pass up the opportunity to be visionary. Imagine yourself as a missionary, and use your marketing materials to prove how you will change the world by solving a set of specific problems that seem insurmountable today.

## emerging technologies hot list

Roundtable participants at the 2003 Emerging Technologies Conference at MIT offered no shortage of future emerging technologies that were exciting and of interest. A few examples include:

- ▶ Cross-discipline integration; e.g., chemistry, biology, and physics
- ▶ Molecular-level semiconductor design
- ▶ Nanofabrication
- ▶ Radio-frequency ID tags (RFID)
- ▶ Statistical analysis and inference engines
- ▶ Molecular-level self-assembly
- ▶ Video screen resolution paper
- ▶ Hydrogen economy fuel cells and wind power
- ▶ Biometrics for personal identification and as a means of preventing identity theft
- ▶ Personalization technologies
- ▶ Wireless infrastructure

## conclusion

As high as the risk — and as long as the ROI timeline — may be, emerging technologies are worth the effort to find, learn about, and acquire, given the real competitive advantage they can deliver to a savvy buyer. As some of America's leading technology buyers noted throughout our panel discussion, it is only by keeping one eye on the leading edge that they ensure their future productivity with confidence. For emerging technology marketers, then, the onus is clearly on telling the right marketing story from day one.

## panel roundtable attendees

### John Andresakis

VP of Strategic Technology  
Oak-Mitsui

### Paul Blackborow

VP of Corporate Marketing  
MKS Instruments, Inc.

### Dave Dozor

CCO  
Metric Vision, Inc.

### Daryll Fogal

VP of Technology  
Honeywell Services

### Slavko Galuga

Dir. of Tech. & Solutions Assessment  
Rosettex Technology & Ventures  
Group

### Chris Herwig

Director of Advanced Technology  
NCR Corporation

### Richard Kirchmeyer

VP for Information Technology  
Western Kentucky University

### Henry Leitner

Asst. Dean for Information Technology  
Harvard University

### Steven Seidner

Chief Technologist  
Georgia-Pacific

### Tony Singarayar

Executive Director  
Johnson & Johnson

### Anil Sood

VP of Engineering & Technology  
Crane Aerospace

### Claudio Souza

VP of Technology  
Unibanco

### Raymond L. Stark

VP of Technology  
Honeywell

### Alan Walker

GM & Chief Engineer - GE Power  
Systems  
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## about us



PJA is a marketing and advertising agency with offices in Cambridge and San Francisco. Since 1988, we have developed compelling marketing programs that generate awareness and drive market preference for enabling technologies. Our goal is to create print and interactive communications that distinguish companies from the crowd, fill sales pipelines, and turn prospects into loyal customers. Our clients have included EMC, IBM Life Sciences, SSA Global, IM Logic, Millipore, PerkinElmer, and Keane.

## TECHNOLOGY

Technology Review, Inc. is leading the new age of innovation, the future of business. It is the only media company dedicated to promoting the understanding of emerging technologies and their impact on business and society. Anchored by its award winning magazine, which was founded at MIT in 1899, Technology Review's product offerings have expanded to include weekly newsletters, a robust Web site and signature events, such as The Emerging Technologies Conference at MIT.

## other PJA Enabling Brands e-Books

### **Get Me in Front of My Top 400 Leads**

by Mike O'Toole

DOWNLOAD

### **Successful Behaviors of Enabling Brands**

by Hugh Kennedy

DOWNLOAD

### **Enabling Brands; Or, Not Everyone Can be Coke**

by Hugh Kennedy

DOWNLOAD

### **Building an Enabling Brand in the Life Sciences Marketplace**

by Hugh Kennedy

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