

MettaTech
Strategic & Tactical Marketing Services

A Marketer's View of High-Tech Around the World



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About MettaTech

MettaTech is a strategic and tactical marketing consultancy offering marketing services to both domestic and international high-tech start-ups.

MettaTech offers a low-cost, high-quality, approach to addressing a firm's marketing demands. We assist our clients in developing strategic marketing plans, as well as in devising and implementing tactical marketing programs.

Our services include:

- Account management, market & competitive analysis, press & analyst management, product management, and project marketing.
- Web site design and implementation, presentation authoring, product training & demonstrations, and events management.

About the Author



Michael Becker has over 12 years of experience in international technology business development and marketing, and has visited and spent time in 49 countries. Michael is founder and primary Principal of MettaTech, a leading Strategic and Tactical high-tech marketing consultancy in the Silicon Valley. Before starting MettaTech, Michael was Director of Product Marketing for Ecrio Inc., a provider of presence-enabled applications and infrastructure mobile handset and server software for the wireless telecommunications industry. He has developed and marketed Internet communities and electronic book-based mobile commerce solutions for Gemstar Inc., and was responsible for marketing, selling, and delivering communications testing solutions at Hewlett-Packard, now Agilent Technologies. He came to Agilent from A&D Engineering. With A&D, while in Tokyo, Japan, he was responsible for developing the European OEM consumer and professional medical electronics distribution channels, and with A&D's United States subsidiary he managed the North and South American markets.

Michael was a Rotary International Group Study Exchange Ambassador to Vietnam, March 2003. He is an active board member of the Silicon Valley American Marketing Association. He sits on the board as Executive VP of Strategy, and held the VP of Collegiate relations role in the '01/'02 and '02/'03 terms. Michael is functionally fluent in Japanese, has an MBA from Santa Clara University, and a BS in Business Administration from Saint Mary's College of California.

A Marketer's View of High-Tech Around the World

By Michael Becker

Abstract

Companies achieve success by delivering value to their customers on an ongoing basis. In years passed, High-tech companies attempted to deliver value through a technology differentiation strategy, which is rapidly loosing value. With the advent of standards, the execution of high-tech solutions is becoming commoditized worldwide, both on the side of hardware and software. Success in high-tech is now being driven through architectural innovations and adherence to marketing best practices.

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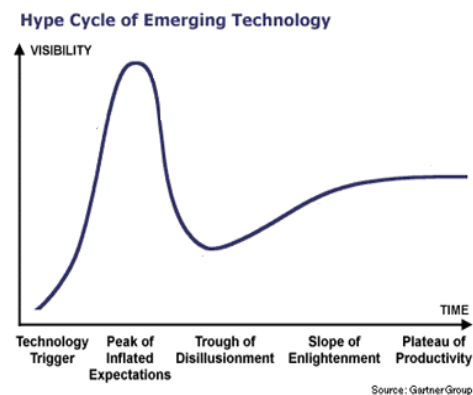
The Path of Technology Innovation

I am fascinated by technology and what can be accomplished with it. I'm an enthralled with all things related to computers, mobile phones, and other high-tech toys. My car tells me when it is sick, my grandmother can take her own blood pressure at home with amazing accuracy, and from our computers or mobile devices we can view a newspaper headline from space, or zoom in with a web cam on a San Francisco Giants fan sitting in seat 10, row 3, section 151 chomping down on a hot batch of Garlic Fries. It is absolutely amazing how pervasive technology has become in our lives. Just think, in 20 short years we've gone from sitting in front of a black & white TV strewn with wires playing Pong, to engaging fleets of battle cruisers with unknown participants at points far and wide around the globe while at home, in the office, the coffee shop, or even at McDonalds.

The technology revolution has changed our lives, our relationships, and how we work, and as marketers we're on a new cusp. Back in 1995 a Gartner Group analyst, Jackie Fenn coined the Technology Hype Curve¹, which discusses the process an emerging technology takes from initial introduction to the point where it finally can be used productively.

The curve's phases include:

- **Technology trigger:** A breakthrough.
- **Peak of inflated expectations:** A point characterized by over enthusiasm and unrealistic goals.



- **Trough of disillusionment:** The point where the technology becomes unfashionable.
- **Slope of enlightenment:** A point where we begin experimentation and solid hard work that leads to a true understanding of the technology's applicability, risks and benefits.
- **Plateau of productivity:** The plateau where the real-world benefits of the technology are demonstrated and accepted.

As marketers, we're in a very exciting time. We're in a time where many of the "technology triggers" from 20, 10, 5 years ago are converging and are ready to be pulled together for productive use. The emergence of mobile solutions, broadband connectivity, ubiquitous information flow, miniaturization, and continually increasing memory storage and processor speeds are creating fertile ground for countless valuable solutions.

This is a global phenomenon. Just look at broadband access, in three years we've gone from 12.1 million broadband households, to 86.1 million today, to an estimated 151 million around the world by 2005², with Asia leading the pack, followed by the United States and Europe. This is amazing growth. There are over 450 million mobile phone subscribers today, with estimated 1 billion by 2006. And information flow is real-time. Just a few months ago, a friend of mine, Roy, with off the shelf equipment: mobile phone, landline phone, recorder, and webcast software, broadcast a live 1 hour webcast (www.lamrim.com) of a teaching being delivered by a high-ranking Tibetan Lama. What made this special was not that the teaching was broadcast over the Internet live, but that the Lama was in Mongolia, while Roy was in Palo Alto, USA. The Lama and Roy we're connected via a mobile phone, Roy patched the call through LamRim's broadcasting tools and the teaching was shared with the world. This was not practical just two or three years ago; with technology, the world is becoming a small, small, place.

What is shrinking the world so quickly? And what are the repercussions of this? What must the marketer concern himself in today's world? The answers are simple. Technology standardization and globalization have shortened average technology life cycles, product life cycle, and have created a new frontier. Before technological interoperability the high-tech marketer could get away with pushing the "hype" and following it up the curve. And, when the technology started slipping a new proprietary solution could be launch to start one going back up the curve. You do this with enough companies and we have a "Technology Boom". The marketers in this booming time could rely heavily on tactics to get the word out, to ride the hype wave, with strategy often laid to the sideline. This worked, because the strategic differentiation was being derived from defensible proprietary technology. This is no longer the case, standardization has taken away the proprietary edge, we must move back to the fundamentals of marketing and recognizing the need that long-term marketing strategy will drive growth, not just engineering prowess alone. Today's high-tech marketer, such as the Chief Market Officer (CMO), is being tapped to "lead companies in their efforts too increase revenue, earnings, customers, and market share...The CMO is expected to lead a turnaround or initiate long term strategy by positioning the company for future

success.”³ This is not the responsibility of just the top marketer, the CMO, but that of every marketer in the organization.

The Evolving Definition and Application of Technology

The landscape and definition of “High-Tech” is changing at a rapid pace, and consequently the breath and role of marketing. The term “High-Tech” was first used to define businesses involved in computers and software, and as of late has grown to also include biotech, engineering services, information technology, semiconductors, and telecommunications solutions⁴. The commoditization of technology is blurring our understanding of High-Tech. We find technology in almost everything today, in toys, to computers, to medical therapy. No matter where we look we see and are linked with technology. This technology enhances our lives through entertainment, productivity, and health. And, now that it has landed in the mainstream, the term “high-tech” has become a colloquial expression used to call out any complex and sophisticated product or service and relies less on the actual science or engineering behind the technology.

This new definition is affecting the role of marketing. In the old world marketers were often relegated to tactical customer outreach functions while engineering worked with the mysteries of the technology. With the mysteries stripped away through standardization we are now moving back to the world of strategy.

In years past we used a differentiated technology strategy as a primary means of standing out in front the pack. We saw this in the bouts VHS Vs. Beta Max, and PC Vs. Macintosh, and we’re watching the Palm OS, Vs. Pocket PC, Vs. Symbian Vs. Proprietary Vs. J2ME rumble in the mobile world being waged today. The proprietary technology was a defensible strategy, but no longer. While a differentiation strategy is still a compelling one, using the basis of proprietary technological in a differentiation strategy in many industries, from computers, to software, to pharmaceuticals, is becoming harder and harder to pull off. We’re now seeing a global movement towards standardization in hardware, software, bioscience to name a few, and this movement has changed the game. In the mobile world the standards include SOAP/XML, .net, X.25, IMPS, SIP, SIMPLE, Java, J2ME, OMA Wireless Village™, etc. With the advent of these standards, high-tech solutions are becoming commoditized, that is less expensive to design and produce, easily integrated, and supported and deployed throughout the world. Technological standardization has changed the economics of delivering and supporting high-tech solutions, which has changed our role as marketers.

In the past it was critical for product teams to work closely together for optimal effectiveness and to achieve the highest quality. Only very large scale, high-budget products, could afford dispersed teams. Times have changed how technology is built, e.g. software, and the economics of it.

Marketers do not need to fret about not completely understanding all of the pieces of the technical solutions they represent. A little known fact is that most engineers do not understand all the pieces of what their building either. The fact of technology today is

that the science has gone so deep that very few people in engineering or marketing can know how every piece works, and this is reflected in the latest engineering process, for instance in how software is coded. In today's world of software development engineers will work on specific Objects, a single component of a larger program or solution. These Objects are designed to perform a specific function, e.g. authenticate a user on a network, connect an application protocol stack to a devices communication stack, or simply render a particular component of a complex user interface. The individual implementers of these solutions do not know how each piece of a complex solution works, except for rare exceptional genius, they just know how their individual piece is supposed to function and how it is supposed to work with the pieces next to it. It is up to the solutions architect, the conductor, to pull the pieces together. Actually, this perspective is very similar to a classical orchestra. The individual players know their own instrument, but not necessarily the other instruments or how they all come together, while the world-class conductor knows every instrument and how to pull them together to make coherent music. So, the world-class technology architect achieves success by pulling the solution together from the pieces, and in today's world of technology many of these pieces, like those in an orchestrate, are standardized. The true value of the "music", and technology, comes from bringing these pieces together.

The standardization of High-Tech is also changing the economics of the industry, especially software. Using software development as an example, we can look at a major cost of developing software, the software engineer. In fact, according to Gartner, by the end of 2004, one out of every 10 jobs with U.S.-based IT vendors and IT service providers will move to emerging markets," such as India, China, Russia, Vietnam. "To many CIOs and business executives, the decision to outsource activities offshore is fiscally sound — the cost, quality, value, and process advantages are well-proven", Diane Morello, vice president and research director at Gartner.⁵ Just two years ago a senior software engineer from halfway around the world, India for example, could come to the Silicon Valley and make hundreds of thousands of dollars. Today, that same engineer stays home and makes hundreds of dollars, while producing exactly the same software with world-class quality in a timely manner. This is possible due to the convergence of communications technologies, standardization of solutions, and training. Next generation differentiation strategies are not going to come from the underlying technology, but rather the architectural design and how the pieces are pulled together. Most technology today, at least the technology that we can use to generate revenues with, is like a box of Legos™, a set of uniform pieces in all shapes and sizes designed to come together easily. But, anyone who has opened up a box of Legos knows that there is a huge difference between building a small Lego bridge and the vast cityscapes of Lego Land. There will continue to be new technology triggers, which will create hype, and then drive new productive solutions 10~20 years from now. But hype is not what we need now. What we need now is to utilize past technological innovation by capitalizing on those maturing technologies converging on the Technology Curve Productivity Plateau.

This is the short-term future of high-tech, the leaders in technology are no longer those that build all the individual pieces, but rather those that know how to assemble the pieces

into a cohesive whole. It is the role of the marketer, though, to help define what this “whole”, the solution, should be, and to help their company understand the customer, his needs, and the market place the company is facing.

The Role of Marketing in the new Frontier

Marketing is the art of customer acquisition, and is responsible for identifying, targeting, qualifying, and engaging the customer by fulfilling the customer's need. High-technologist often have the misconception that through their technology they are creating needs. Technology does not create a need; it fulfills it, it just so happens that sometimes a need has to wait to be fulfilled until the technology becomes available, and then it is easy to be led astray and forget which comes first, the chicken or the egg. This is critical for the marketer to understand. No matter how complex, or simple, our technology becomes, in the end the point of a business to solve someone's problem. As marketers, regionally, national, or internationally, we can never lose sight of this if we are to succeed. As marketers, moving toward a new frontier of applied technology, it is our job to make our companies great through the process of understanding our customers and their needs, not by hoping on to the next curve triggered by a new technology. Jim Collins in “Good to Great” notes how technology has nothing to do with the success of a company, but rather the people that are put in place and their dedication to success.⁶ In the end, this success will come through rigorous discipline, the application of strategic and tactical marketing principals, and a passion for service: service to the customer, service to the company, and service to the market.

¹ “The Microsoft System Software Hype Cycle Strikes Again”, Gartner Group, July, 1995

² Broadband Worldwide April 2003 Executive Summary, eMarketer Survey.

³ “World-Class CMO”, Christopher Lockheed, Lockheed Corporation.

⁴ <http://www.techweb.com/encyclopedia/defineterm?term=high+technology>

⁵ “Gartner Says Tech Jobs Will Continue to Move Overseas”, Internet.com (<http://www.internetnews.com/bus-news/article.php/2241641>), Michael Pastore, July 29th, 2003.

⁶ “Good To Great”, Jim Collins, Harper Collins 2001, page 11.