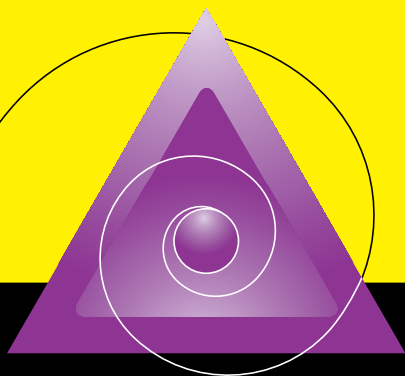


THE TECHNOLOGY GUIDE SERIES®

www.techguide.com™

The Internet and e-Business Opportunities



This Guide has been sponsored by

KEY3MEDIA GROUP, INC.

Visit ATG's Web Site
to read, download, and print
all the Technology Guides
in this series.

<http://www.techguide.com>

“The significant problems we face cannot be solved
by the same level of thinking that created them.”

Albert Einstein

Table of Contents

Abstract	2
Introduction	3
The Internet Opportunity Problem.	4
New Business Models for the Internet Economy.	7
The Internet Brings New Rules; New Processes	10
Improving Business Relationships in the Internet Age	14
Leveraging Technology	16
Global Advantage	19
Marketing and Legal Issues for the e-World	21
Staying Informed on All Things Internet	25
In the Beginning	28

About the Editor...

Jerry Ryan is a principal at ATG and the Editor-in-Chief of techguide.com. He is the author of numerous technology papers on various aspects of networking. Mr. Ryan has developed and taught many courses in network analysis and design for carriers, government agencies and private industry. He has provided consulting support in the area of WAN and LAN network design, negotiation with carriers for contract pricing and services, technology acquisition, customized software development for network administration, billing and auditing of telecommunication expenses, project management, and RFP generation. Mr. Ryan has been a member of the Network+Interop Program Committee and the ComNet steering Committee. He holds a B.S. degree in electrical engineering.

The Guide format and main text of this Guide are the property of The Applied Technologies Group, Inc. and is made available upon these terms and conditions. The Applied Technologies Group reserves all rights herein. Reproduction in whole or in part of the main text is only permitted with the written consent of The Applied Technologies Group. The main text shall be treated at all times as a proprietary document for internal use only. The main text may not be duplicated in any way, except in the form of brief excerpts or quotations for the purpose of review. In addition, the information contained herein may not be duplicated in other books, databases or any other medium. Making copies of this Guide, or any portion for any purpose other than your own, is a violation of United States Copyright Laws. The information contained in this Guide is believed to be reliable but cannot be guaranteed to be complete or correct. Any case studies or glossaries contained in this Guide or any Guide are excluded from this copyright.

Copyright © 2000, The Applied Technologies Group, Inc., 209 West Central Street, Suite 301, Natick, MA 01760, Tel: (508) 651-1155, Fax: (508) 651-1171
E-mail: info@techguide.com Web Site: <http://www.techguide.com>

Abstract

The E in e-business shouldn't stand for electronic it should stand for "extensive." As new and established businesses embrace the Internet, the changes are far more dramatic and far-reaching than the addition of a Web address to everyone's business card. Entire organizational charts are being re-arranged, new competitors are arriving, and old ones are fighting back. The Internet is changing everything, creating a whole new world that you should want to conquer.

This Technology Guide provides a strong outline of the issues and how people are grappling with them. And it provides a framework to help you tackle your own e-business issues.

Introduction

Building e-business and e-commerce strategies and applications are perhaps the most important issues facing today's corporate world. The Internet has indeed changed everything. Beyond the hype and the headlines exists the real work of building the new business structures and technologies that can ensure success in a rapidly changing business world. Today, companies are evaluated as much on their ability to adapt to the Internet as they are on their previous performance. This pressure has been created by a worldwide realization that the Internet is the way the world will work. Thus, companies that aren't using the Internet intelligently aren't working intelligently at all.

The Internet has created the challenge for every area of every company. The challenge isn't simply to change one aspect of how a business operates – it's to change every aspect. All of this is occurring against a backdrop of competitors and startups hoping they can use the Internet to be better than you. Keeping pace on the Internet thus becomes critical; it's easy to fall behind, especially if you develop your plans and sites in a vacuum, failing to watch and learn from the best-of-breed Internet successes.

How do you keep pace? How can you quickly get up to speed on the challenges and opportunities the Internet presents? It starts with understanding the key issues all companies face in this new era of business. Understanding the critical areas of concern for Internet and non-Internet companies, and the problems and opportunities for each, makes the solutions easier to understand and implement. At that point, attention turns to technology questions — how to implement what is possible and how to do it right so the possible doesn't develop into the unthinkable.

As the age of the Internet unfolds, many business-people and consultants see the key to success as being as much about the right plan, the right business model, and the right corporate structure as it is about Web pages and fancy Internet infrastructure. Every company must learn to change and to implement change in order to take advantage of the new ways the Internet allows companies to market products, obtain supplies, provide customer service, and interact with business partners. Integration is the true key. The more you can use the Internet to tie together your corporate infrastructure, goals, and technology, the more successful you can be.

The Internet Opportunity Problem

“Losing the opportunity is the biggest problem”

Anyone even remotely involved with the Internet recognizes that it offers the greatest new opportunity for business in more than a century. What we originally called the information revolution is now the Internet revolution. Some even call it the “New Economy”. Companies relegated to “Old Economy” status by analysts, peers, and employees are quickly witnessing some of the same exodus finding themselves; abandoned that like the textile mills and shoe factories experienced 40 years ago as the industrial revolution moved south to Asia from its largely New England roots. Ironically, the large brick buildings those mills left behind are now the trendy office spaces of many Internet startups. Companies seeking the incredible opportunity of the Internet live among structures that dot the landscape of the rust-belt, the industrial

Northeast and South, and the fossil structures of companies that dominated a previous economic era.

Backed by millions in venture capital, pioneering companies housed in old warehouses and renovated mills began mining the Internet for gold. Like the miner-49ers before them, these startups knew the gold was there – it was just a matter of getting it out. Today the Internet plays the role of the rolling California hills – the gold is there; the problem is getting it out before someone else does. Like economic upheavals of the past, and like the gold rushes of old, the biggest problem is losing the opportunity itself.

As the Internet has developed from its origins, a defense department and scientific messaging network, to a consumer and business phenomenon, it has generated untold numbers of opportunities for businesses old and new, big and small. These opportunities include:

- A tremendous new way to reach customers and gain advantage over competitors.
- Instant global reach.
- Streamlined distribution channels, and logistical operations.
- The ability to cut the price of doing business, lower procurement costs and drive costs toward zero.

However, for all the opportunities it creates, there are inherent problems with the Internet in general and with its current status specifically. Creating a Web site may seem trivial if it merely explains a company, the company’s products, and the company’s purpose. Creating a state-of-the-art site with e-commerce functionality, connection to back-office systems, customer service functionality, and the ability to scale to a large number of simultaneous customers is neither trivial nor easy. Even the largest companies, with immense

financial and technical resources, routinely fail in deploying viable and stress-resistant Web services and applications. It is increasingly easy for competitors, upstarts, and smaller companies to do a simple site with a browseable catalog. This creates dozens of nimble (if not robust) competitors that will rip apart any laggards that fail to keep up with the heard.

Also hiding in the weeds are malicious thieves and quixotic hackers who will compete to disable your site, disrupt services, or cause financial harm to you or your customers. In a world where trust is a critical enabler of e-commerce, random or targeted acts by people or organizations bent on stirring up trouble can destroy an online brand and trust relationship, causing irreparable damage to your business, online and off. So if the opportunity costs and competitors weren't high enough, there is also the need for tight security and availability, all in the name of one goal: succeeding on the Internet.

The companies that best recognize and capture the many opportunities the Internet will offer while avoiding the potential pitfalls will be rewarded. And the opportunities are everywhere; every facet of business is changing — from customer acquisition to fulfillment, to purchasing and internal management. Companies can't afford to resist any aspect of these changes.

The size of the opportunity and the possibility of failing to capture some successful piece of it creates the defining problem of the Internet: "The Internet Opportunity Problem." Never before has an opportunity of such magnitude been thrust upon the world so quickly. The great thing about this is that seizing the opportunity gives you a leg up on everyone else who is still trying to understand the basics. By reading this paper and understanding the dilemma at hand, you are already further along than many other companies.

Has the Dot.com Bubble Burst?

"Trouble in River City"

As the 21st Century opened, the euphoria over the potential of the Internet had investors scrambling to climb aboard the latest 'dot.com' IPO. The market quickly became inflated with stock prices and profits rising more like a Ponzi scheme than bona fide business development. But that didn't take long to crash and burn. Amateur day-traders, first time investors, and venture capitalists all took a hit as prices tumbled and dot.coms bit the dust. Many analysts however, think that it was a very healthy adjustment as untried and baseless startups burned up; just as a prairie fire cleans out scrub brush and weeds to make room for the healthy to grow. With many of the dot.com failures has come a painful but extremely useful lesson for other companies as they explore their own Web destinies. Like all businesses, success will come to those organizations that take time to examine the real value exchange taking place, and do their planning and preparation with diligence and care — and heed the lessons of the failures of the dot.com Ponzis.

New Business Models for the Internet Economy

"A new world requires new strategies"

Success in business on the Internet is as much about retooling how you do business as it is developing a technically dazzling Web site. Without the right model — the reasons people should engage a site and do business via that site — even the best developed Internet plans can fall apart. Conversely, the best intentions can be laid flat through poor site design, technology, and promotion. Like other shifts in

previous economic revolutions, the rules and ways customers and suppliers come together to do business have changed.

The Internet is creating entirely new ways for people to engage in commerce that couldn't have existed prior to the Internet. The Internet is changing how even the most mundane and conventional business is conducted. The most obvious example is the online auction. Prior to the Internet, auctions were a business model relegated to the back roads of America, bankruptcy, and the well-heeled set at Christie's and Sotheby's. Today, auctions are at the forefront of the Internet's dynamic nature and eBay, a consumer-to-consumer Internet auction house, is on its way to becoming the type nearly as of ubiquitous a brand as McDonald's or Wal-mart are today. And it is reaching such status in a fraction of the time it took those companies.

Priceline.com has taken the auction model one step further and pioneered reverse auctions that give customers the chance to have large companies bid to win the customers' business. Mercata and MobShop (previously called Accompany), two relative newcomers to the Internet, are pushing a model that lowers the price for goods as more people within a specified span of time agree to purchase the product.

Without the Internet, it is hard to imagine such business models ever existing much less succeeding. While not every business will need to implement new or exotic sales or business models, many are adding such tools to an overall mix of models and techniques they employ.

In many ways, what the Internet creates is a world where no single approach works best. As the Internet creates a large array of models, and communities of consumers who respond to them, some of the best companies are turning to each and every one. By integrating an amalgamation of practices they bring

together the best of all worlds – and as a result, a larger piece of the overall consumer pie. This is especially true of many pre-Internet companies and retailers who already have to grapple with the issue of coordinating online and offline sales.

Any offline company is a potential multi-model company. As soon as an offline store or company extends itself online, it opens another channel to its customers, and business partners. While some level of a business may shift online, most companies won't become entirely virtual. A great example is Eastman Kodak. The venerable photography giant is facing an incredible new world due to the Internet. But instead of dropping everything in favor of the Internet, the company is looking to integrate it throughout some of its pre-existing channels. For example, Kodak is putting Internet based kiosks in stores around the world. These kiosks let customers access and order prints from previously scanned photos and enabling people to get both prints and digital scans from any Kodak-connected processing shop.

In short, the Internet creates new ways to do business; companies must be able to embrace these new ways or risk losing business or competitive advantages to other companies. At the same time, many existing companies should seek to use the Internet to strengthen pre-existing business channels. New technologies can help. In the early days of the Internet, ideas were long but tools came up short. Today, the rapid maturation of development tools and technologies makes it much easier to implement robust new business models and services.

The Internet Brings New Rules; New Processes

“Capitalizing on the chance to change”

In the first years of the Internet, changing the rules of business was actually a point of contention for old companies vs. new companies. With their venture backing and first-mover status, the Internet startups won the battle and began defining the new rules of e-business and business in general. But it isn’t just the presence of startups and their new ways of working that have kept previously existing companies from diving headfirst into or succeeding on the Internet. Table 1 outlines some of the reasons and why they are important to understanding the changing nature and rules of Internet business.

TABLE 1: Examining the Changing Nature of Internet Business

What Happened?:	Many companies had difficulty in restructuring existing companies.
Explained:	Many times, success on the Internet requires changing the structure of a company or adding new business models to a marketing mix. Both of these are tougher to apply to an existing company than they are to one that has begun with a blank slate.
Example(s):	Many traditional retailers don’t have logistical systems in place to do fulfillment to individual consumers and have had to outsource or retool fulfillment operations. Traditional sales forces are being supplanted by Internet ordering, forcing companies to rethink the role of traditional salespeople.
What Happened?:	Many companies slow to realize the power and strengths of the Internet.
Explained:	Slow to realize the emerging power of the Internet, many companies still haven’t fully gotten themselves on the right track. And despite gains made, some are late compared to first movers. While there is much room left in the race to win on the Internet, many companies are behind and still have catching up to do.

Example(s):	While the ultimate results may vary, many existing retailers were caught off guard by the jump that online retailing startups got on them. The major TV networks have also watched as their audience has drifted toward large-scale portals and the Internet in general.
What Happened?:	Economics of high-investment; tax structure and no profits favored startups.
Explained:	The incredible investment the Internet can require in some cases (e.g. retailing) favors companies that don’t have existing profits, positive cash-flow or growth histories that they are expected to maintain by their shareholders and stakeholders.
Example(s):	Some companies have failed to integrate offline and online holdings due to tax implications. Other companies have been slow to divert millions in existing investment or profits into emerging profitless Internet initiatives, which, in some cases may have cost them the initiative.
What Happened?:	Technology and business talent was critical – and the incentives startups offered gave and continue to give them access to top talent.
Explained:	Talent is at a premium due to the Internet. Startups that are built on valuation gains, a buoyant investment market, and shareholder equity, are getting easier access to the best talent both within traditional technology industries and in the greater corporate community as well.
Example(s):	Top companies such as Black & Decker, Wal-mart, and AT&T have lost major executives to Internet startups.
What Happened?:	Tools to enable higher-end business systems to move to the Web have been slow to arrive to market.
Explained:	The first several generations of Internet development tools, servers, and logistical systems didn’t offer any connection to back-office systems. Most tools focused only on taking retail orders. Tools for procurement, business-to-business trade, and employee collaboration have been much slower to come to the market, crippling the ability for larger existing companies to get some key gains specific to them that the Internet does offer.
Example(s):	Products that facilitate tying together disparate corporate systems like Microsoft BizTalk, XML, or HP’s E-speak are still in the beginning stages. Procurement systems and marketplaces will be critical ways for existing businesses to take advantage of the Internet have only gained traction in late 1999.

Despite initial problems and obstacles, many existing companies have become aggressive in regards to the Internet. However, as they have moved online, the rules are changing once again. Companies as large and diverse as General Electric and Ford are charging ahead into e-business, proving that with their considerable size, brand, and logistical infrastructures, they can be instant leaders.

Coupled with the rising status of existing companies successfully implementing sound Internet strategies in late 1999 and early 2000, many startups, especially in areas like e-commerce, began showing their weaknesses. Startups lacking the presence, relationships, experience, logistical foundation, and brand power of an existing powerhouse have stumbled as they find it harder to acquire customers and build the trust and critical mass many of their non-virtual competitors already have. What's more, some startups have struggled as they lack the profits and positive cash flow from existing operations and existing customer relationships.

Interestingly, the Internet business landscape has two camps that could learn from each other. Startups are increasingly seeking to diversify from their virtual existences. For example, eBay bought offline auction house Butterfield & Butterfield and online bookseller Fatbrain.com purchased local technical bookshop chain Computer Literacy. Several Web startups, including Yahoo, and eBay have started offline magazines or book presses. At the same time, many existing companies are implementing online strategies more akin to startups (e.g. Proctor & Gamble has partnered with venture capital firm Institutional Venture Partners to launch reflect.com) in order to take advantage of the business structures and models that make them highly attractive to investors and key talent.

Startups and existing companies each have unique opportunities and problems for winning the Internet race. However, both made the same mistake early on by seeing the Internet as a box unto itself. Startups saw the Internet as a world where only new, completely virtual companies would win by proving too nimble for offline competitors. Existing companies also saw the Web as a separate entity — an interesting marketing medium perhaps, but not something worth restructuring the company around. Today, both of those views have come tumbling down.

Table 2
Internet oriented startup

First Phase Thinking:	The Internet will be ruled by companies who are nimble net-only startups able to take advantage of the Internet's ability to redefine the rules of business and customer acquisition.
Second Phase Thinking:	Being only a virtual company is easier said than done. We need to build ties to existing companies and physical infrastructure that will give us a better competitive edge and ability to serve customers who don't necessarily lead a 100% "Web lifestyle".

Conventional existing business

First Phase Thinking:	The Internet is a separate entity for marketing and sales. It's only worth our time when it's evident that the Internet is important to our bottom line.
Second Phase Thinking:	If we can transform ourselves to take advantage of the Internet we can create a best of breed world that combines the Web with our existing operations. The Internet is not also a separate entity it's the new platform for every facet of our business.

As second-phase thinking takes hold, every type of company has a better understanding of the Internet's role and how to structure for it. There may have once been two distinct camps and each one still has its stalwarts. But the newest breed of company creates entirely new structures that integrate the Internet and offline services into new stronger offerings.

Improving Business Relationships in the Internet Age

“New relationships in the age of the Internet”

As more and more households go online, the very nature of how companies interact with their customers is changing. Nearly two-thirds of the U.S. population and half of all households have some form of access to the Internet. The Internet changes the dynamics of how companies view and interact with their customers (e.g. affinity marketing, community based relationship marketing, and online customer service) and their business partners. Improving the relationship aspect of business is becoming an important aspect of a successful transformation into an Internet business. In fact, with news coverage so focused on online retailing, it is sometimes lost for many companies that don't sell traditional goods or services (online or off). It is this aspect of e-business development that is becoming the most interesting and important.

The Internet is redefining the way companies interact with their customers in many specific ways including the following:

- The Internet unleashes the best chance to create personalized approaches to many forms of

customer and business partner relationships. This includes offering special prices to certain repeat customers, remembering their favorite color choices or birthday, and more.

- Companies are using the Internet to enable more direct contact with their customers and partners. The Internet removes many layers of distribution and communication, enabling customers to interface more directly with companies than ever before. And while there are many reasons to work with and protect existing sales channels and partners, companies are recognizing that a certain group of customers would rather deal directly with a company than through intermediaries.
- The era of easy sales is over. Even before the Internet, marketing and branding programs had already begun to move toward more personal and deeper forms of marketing aimed at locking in customers via loyalty and affinity programs and clubs. The Internet only accelerates this move by providing the best platform ever for building and offering customers affinity programs, and organizing marketing efforts around loyal user communities.
- The nature of what people will pay for is also changing. The fastest growing differentiation factors today are services, support, and customer relationships. Internet and consumer culture are causing dramatic changes in what customers will actually pay for. In many cases, customers are demanding (and receiving) free products (e.g. cellular phones, computers, digital content) and then paying specifically for a service enabled by their ownership of that product. Services provide better margins and in an age of “me-too” products, open-source software, and piracy, they are inherently harder to duplicate. By using products

as market makers, and the Internet as the platform to deliver services and relationships in a way that brings true value to a purchase, companies are redefining customer service by making it the product people want to pay for. The new age of business and customer relationships is creating one-to-one situations that provide the maximum amount of personal attention for the least amount of effort. However, one-to-one marketing is more than just an Internet catchphrase of the moment; it is a practice that results in increased customer revenues, retention, and satisfaction, as well as more efficient relationships with vendors and other trading partners.

All companies must implement ways to bring customers into the fold and then give those customers the means to benefit from one-to-one relationships — and this isn't an easy process. It's a high-end system that combines cutting-edge technologies that many companies haven't yet mastered or even discovered.

Leveraging Technology

“Can technology finally make a difference?”

When it comes to leveraging technology as it relates to Internet business, there are two key issues that move to the forefront of any Internet business strategy:

1. How do companies leverage their current technology infrastructure and make the most of it in the age of the Internet?
2. How do companies use software and technology as leverage against those that do little more than

publish static content to construct distinctly better ways to provide service, sell products, and provide information to partners and customers?

“The challenge of previous technology investments”

The Personal computer has been with us for more than 20 years. During the last decade, companies have spent hundreds of billions of dollars on PCs, LANs and ERP (Enterprise Resource Planning) systems in hopes that their productivity would increase tremendously. Ironically, while all this technology did make some difference, the large gains companies had hoped for from PC technology never seemed to fully materialize.

In survey after survey, many CEOs and CIOs have said that all their technology spending in and of itself hasn't truly made their company dramatically better or more efficient. In some ways, the potential benefits of PCs and LANs were overestimated. However, those first two generations of technology were the embryonic steps of a productivity boom that the Internet has finally unleashed. The Internet isn't fixing the productivity capabilities that PCs and LANs had previously promised, it's building on top of that and finally allowing the connection of this infrastructure to the places where business really gets done — with customers and business partners.

The leverage that technology has given has really only been a recent phenomenon and the connected nature of the Internet is the reason why. This means that one challenge of Internet business that companies must face is how to use the Internet to leverage their existing technology infrastructure.

In the first phase of the Internet, most sites were standalone systems, connected only to customers with very little integration with existing systems. Even today, many Web sites and Internet initiatives are virtually still disconnected bastard step-children amongst the

overall framework of LANs, WANs, and back-office systems companies have constructed over the previous decades of existence.

“How do companies capture the productivity gains the Internet provides?”

Many experts and business leaders feel the real promise of the Internet is the ability to drive costs toward zero. That is, the Internet enables true efficiency in many costly aspects of marketing to consumers — pushing sales and managing distribution. By using the Internet to drive these costs toward zero, companies gain efficiencies that directly affect the bottom line of the cost of a product or service and the bottom line of the company itself. These cost savings can then be redistributed as reinvestments, better profits, or savings to consumers (which in turn might expand market share, etc.).

Driving costs toward zero by using the Internet is easier said than done. The capability is finally there, but many companies are grappling with exactly how to do this. Five critical areas seem to be emerging to form a general roadmap:

- Streamlining back-office integration.
- Improving margins and response time by developing direct ways of reaching and selling to customers and working with channel partners.
- Improving logistics within the distribution chain, improving on commonly practiced just-in-time manufacturing practices.
- Introducing Internet purchasing systems and cooperatives to gain advantages in both the time and money spent on procurement.
- Lowering customer service costs by improving efficiency using Internet technology and methods.

Global Advantage

“You’re going global whether you wanted to or not, so make the most of it.”

When you’re on the Web, you’re global — even if you haven’t been before. This fact has had a dramatic effect on business now that even the smallest firms can reach a global audience that previously was owned by those who could build viable local presence or partnerships with international partners. Not only does this call for strategies and models that embrace the global nature of the Internet, it also presents a host of technical development problems — from Web site translation to local servers and domain names, to international fulfillment.

Going global is something that many companies haven’t dealt with. To have globalization suddenly thrust upon them can be daunting. On the technical side, Internet businesses must deal with:

• Multiple language support

Should a site support multiple languages, providing translated versions of all pages in key local languages? Doing so will certainly be a boost to international business, but will also encourage customers to interact with you in their native languages. This requires customer support services that can deal with multiple languages.

• Worldwide fulfillment

Shipping from warehouses to single customers in multiple countries can be a nightmare if not handled correctly. Custom and export issues, local ordinances, and time-to-deliver issues are all problems that will need to be solved to be successful on an international level.

- **Currency and payment issues**

While the use of credit cards makes it easier to deal with currency issues on the Internet, international customers would like to see pricing displayed in their local currencies. International payment forms also extend beyond the most common credit and debit card offerings in the U.S., especially in Europe.

- **Speed of service and availability**

For robust international growth, companies have to consider localized hosting and Web presence. This adds a whole new dynamic to your Web hosting plans, including the need for mirroring and support of an international technical infrastructure.

- **Customer service**

As previously mentioned, businesses that embrace an international presence on the Internet must be ready to build a customer service infrastructure to support it. This includes support professionals who can speak different languages and telecommunications that enable international customers the same ease and cost of contact afforded to domestic customers.

In the past, and even today, the idea of being global simply meant having a single Internet presence of any kind. As the Internet matures, and international growth and competition increase, being global on the Internet will mean doing more than just existing. True global Internet companies will create distinct international strategies, customer support, and technical infrastructures to enable them to localize their approach to each distinct customer, wherever they reside. Those that don't will still struggle to deal with the problems that come with instant global access as well. But those

that take the extra steps to be truly globally oriented will reap the lion's share of the benefits of the global nature of the Internet.

Marketing and Legal Issues for the e-World

"It's a new world after all."

The Internet may be quickly entering new rounds of maturity and use, but even the most savvy of Internet marketing pros will say that they're still in the prenatal stages of what they hope will be the most engaging and productive marketing medium of all time. The Internet changes the dynamics of marketing to a new paradigm, one that focuses on one-to-one relationships and that develops out of a series of interactions with consumers more than any single approach.

Despite the hype, the Internet doesn't require companies to change their overall message or approach to building their brands. The same tried, and true connections people make between a company and their marketing message will still hold true on the Internet. However, the methods used to build that message, and the intermingling of servicing customers due to the interactive nature of the Internet, are dramatically different. As a result, the Internet is forcing old companies to learn new tricks. The benefits of learning the new rules of marketing more than make up for the upheaval that may be wrought on a company as a result. Effectively used, the Internet creates a powerful marketing medium that can bring companies and their customers much closer, and allows companies of all sizes to turn their customers into ongoing relationships and revenue.

What are the driving forces of this revolution? What new trends are converting a world built on mass-marketing practices into one that is built around one-to-one relationships? The following items show the way:

- **Marketing is now one-to-one not one-to-many**

As populations, due to the Internet, segment into ever finer groups, broad messages are losing their appeal. Furthermore, as individuals demand personalized contact with companies and tools improve, it becomes ever easier to display unique messages and promotions specifically to individuals which, executed correctly, should improve the results of all targeted marketing.

- **Personalization is key**

The Internet promises a world where everyone knows (a lot more than) your name. In essence, personalization is a pact between a provider of information (the buyer) and the seller. The promise is simple, tell us more about what you want and we'll do a better job of optimizing a transaction for the buyer. This accelerates the ability of consumers to get what they want, when they want it, and how they want it. As a result, customers are not only happier but there is also an increase to the bottom line. According to personalization pioneers Net Perceptions, properly implemented retail personalization processes can raise revenues as much as 3-5%. Personalization is thus the key aspect of the Internet's promise to raise revenues and profits. As these amazing, but early generation tools improve it should only get better.

- **Creating on-going relationships/ conversations**

At its heart, the Internet is an extensive two-way peer-to-peer communications system. In its best form, online marketing must adapt itself to this medium and create interactive campaigns and processes that in effect create two-way conversations between them and their customers. On the Internet, broadcasting is possible but that is only half of the capability to pursue. The best practitioners, through tools and services such as bulletin boards, discussion lists, chats, immediate messaging, and sophisticated email systems create true conversations between them, and between their customers which creates the kinds of bonds, community and abilities that leave a positive lasting effect on customers and businesses alike.

- **This creates privacy issues**

As the Internet pushes marketing toward a one-to-one world, where personal knowledge is recorded and used to the benefit of the consumer, all organizations are grappling with both the legal written rules, and the "unwritten rules" of consumer expectations in regards to privacy. The rules have yet to be completely written in detail, but it's already clear that those who safeguard customer data and respect the privacy people feel and believe to be an inalienable right will be rewarded. Not only by avoiding lawsuit or backlash, but, in fact, with the sharing of more and more data by customers who know it serves them well and is rightly protected.

- **Building trust in a permission-marketing world**

As privacy and personalization grow in the virtual world of the Internet, trust becomes an even

greater aspect of all e-business. It is essential in any transaction that a certain level of respect and trust exist between the parties conducting business. One of the great promises for off-line stalwarts is that they bring with them years of established trust to transfer to the virtual world where upstarts are struggling to gain the acceptance of a skeptical public. In some ways this is a key battle in the e-business war, being the first to gain the trust of users to share information, and work together to create an optimal environment for doing business.

As marketers and other developers build the Internet and create a new way to do business and engage customers, they are indeed creating a new world. However, this new world has come with few rules, and a legal environment that can be best described as “undefined” and more poetically compared to the wild west of the 1800s where the law was whatever you made of it – and yourself.

Whether it is the nature of Internet taxes, patents for business models and critical e-commerce elements, local laws and regulations, or the improbable enforcement of intellectual property issues, businesses must realize and deal with a multitude of legal issues on the Internet.

With such a number of legal issues not yet settled on the Internet, businesses must develop a strategy on several fronts that helps them deal with operating online. This includes the following principals:

- **Safeguarding** against legal exposure or consumer complaints about improper business activities, especially concerning use of personal information provided by consumers.
- **Ensuring** compliance with standard online practices whether they are governmental regulations or commonly consumer expectations.

- **Developing** strategies and practices to ensure protection from and compliance with emerging intellectual property, copyright, and patent issues.
- **Monitoring** local, federal, and global Internet laws and regulations to stay on top of the latest settled issues as law on the Internet (especially tax and intellectual property issues) begins to become more defined.

This is a new world of business, and new rules apply – some of which haven’t even been set or seen yet. As the Internet matures and e-commerce expands, companies must adopt new practices and be ready to comply with new rules as governing bodies catch up to the Internet, and consumers and advocacy groups develop their own expectations.

Staying Informed on All Things Internet

“Keeping up with the Joneses.com”

Will Rogers once said, “Even if you are on the right track, you’ll get run over if you just sit there.” Mastering the world of Internet business is not any easy task. Keeping pace on the Internet should be a full-time job. There is no single way to do things, no magic “E-Commerce 2.0” software standard. It is more than a technical hurdle. Internet business as explained also requires you to engineer non-technical aspects to your company, including corporate structure, business rules, and overall business models.

The rapid pace of change requires not only a solid foundation in how the Internet is emerging to change business, but a level of dedication to keep up with the

constant innovation. In the early going, falling behind peers has been dangerous. But as the technologies improve and new products and practices emerge, falling behind and/or staying behind will only increase the adverse effects. This is just as certain for companies that are currently on the right track. How do you keep the train moving and capture the many future gains a maturing Internet will present?

Keeping pace begins with understanding what is technologically feasible for business on the Internet. This Technology Guide has described much of what the state of Internet business is and the various goals most companies should have. However, to get a real footing on the capabilities of the Internet you need to evaluate peers, competitors, technology, and market leaders.

Despite rapid maturation, most Internet business tools and software are in their infancy. For example, Web servers and application servers, two essential pieces of e-business software, are barely entering their fifth and six generations (compared to common office applications, databases, and operating systems that are now in their ninth and tenth generations). Imagine what your current operating system or word processor looked like four or five generations ago? Now imagine how much more powerful your Internet development tools and technology will be four and five generations from now? Add to this the new software, services, and techniques that appear daily as infrastructure and development tools debut and are upgraded. The result is that evaluating the latest tools and Internet technologies and keeping abreast of the newest developments are critical to winning the race on the Internet. For all the progress the major software and technology vendors have made, there is still a lot of infrastructure yet to be built. You will want to take immediate advantage as the infrastructure, tools, and servers improve.

Technology capability is one piece of the puzzle. Application is the other. How others utilize, integrate,

and adapt to the latest Internet technologies is an equally important area to follow closely. A Web server — as advanced as they come — doesn't jump out of the box, set itself up, and or bring you a winning business model. The insight gained from watching and hearing how other successful ventures have structured and accomplished their goals on the Internet takes on an increased importance given the opportunities, pitfalls and challenges documented in this Guide. Operating in a vacuum is a pleasure the Internet does not bestow upon anyone.

With so much to learn and so much changing what is the easiest ways to keep up? We see several:

- Adopt a strategy that includes staying vigil in an era of rapid change and innovation.
- Keep pace with capabilities that foundation Internet technologies provide.
- Routinely attend forums and gatherings where companies showcase best practices and state of the art applications of e-business.
- Consistently seek and evaluate benchmark sites and companies and how they enabled their e-business strategies and applications in order to acquire the knowledge needed to build and improve your own endeavors.
- Constantly evaluate your Internet strategy and technological capability and deployment against those of your competitors and of leading practitioners outside your industry and seek the means to close any gaps.
- Evaluate and learn from leading managers how they have changed their corporate structures and strategies to adapt to the world of the Internet.

While a site can be viewed from any capable PC, the thought process behind it, the failures endured

while building it, the workarounds created to launch it, the evaluation points used, and the technology selected are invisible. Even strong Web demonstrations of a server system don't illustrate the trials and tribulations that actual deployment will cause. Most, if not all, of these tasks are accomplished only by getting out from behind the desk. Ironical as it may sound in this virtual world, the best work comes through physical contact. Traversing show floors at conventions in search of the latest enabling technologies, participating in seminars and forums to learn from other practitioners, and learning from leaders who have developed identifiable best practices and pioneered the technological applications of the Internet are critical to Internet success.

In the Beginning...

The recently reopened Hayden Planetarium in New York City features an exhibit known as the Heilbrunn Cosmic Pathway. The Pathway, a sloping 360-foot walkway around the planetarium theatre, features 13 markers that each denote the passage of 1 billion years. Eight landings entertain visitors by showing the relative size of the universe including the first existence of stars, galaxies, and the Milky Way itself. As you make your way to the bottom of the pathway, each step advances you millions of years. But it's the bottom of The Cosmic Pathway that brings home the most dramatic point. At the very edge of the walkway begins the Age of Dinosaurs — less than two feet from the end of the Pathway. All of recorded human history is contained within a stripe as thin as a human hair.

Internet business is the Heilbrunn Cosmic Pathway in reverse. Where we stand now is the mere width of a human hair when compared to where we will stand a few years from now.

Visit ATG's Web Site
to read, download, and print
all the Technology Guides
in this series.

<http://www.techguide.com>

“The significant problems we face cannot be solved
by the same level of thinking that created them.”

Albert Einstein

This **Technology Guide** is one in a series of topic-focused Guides that provides a comprehensive examination of important and emerging technologies.

This series of Guides offers objective information and practical guidance on technologies related to Communications & Networking, the Internet, Computer Telephony, Document Management, Data Warehousing, Enterprise Solutions, Software Applications, and Security.

Built upon the extensive experience and ongoing research of our writers and editorial team, these Technology Guides assist IT professionals in making informed decisions about all aspects of technology development and strategic deployment.

techguide.com is supported by a consortium of leading technology providers. Key3Media Group, Inc. has lent its support to produce this Guide.

Visit our Web site at **www.techguide.com** to view and print this Guide, as well as all of our other Technology Guides.

This is a free service.

produced and published by



visit www.techguide.com™