



UNDERSTANDING THE NET ECONOMY REVOLUTION

WELCOME TO YOUR FUTURE

The explosive growth of today's e-commerce market has garnered much attention—but in the next few years, analysts project yet another tenfold increase in Internet connections and a 40-fold increase in the dollar volume of transactions. Business is clearly at the threshold, not just of a trend but of an upheaval that will keep changing the way we think about commerce, the way we do business, and the way our efforts are valued. We are in the Net Economy revolution.

This paper focuses on the factors shaping these changes:

- **The business rules** you probably weren't taught in school, that may help you reconceive your organization
- **The markets** that give us reason to focus on e-commerce, and what you need to compete in them
- **The Net Economy model**, with its demands for communication, adaptability, flexibility, and knowledge

HOW BUSINESS RULES HAVE CHANGED

Business and economic activity have progressed from an early emphasis on serving local markets using physical facilities to the contemporary ideal of serving global markets using a virtual, electronic presence. This evolution has been marked by radical shifts in:

- Business environment
- Asset definition
- Rate of change
- Production

Each change altered the way companies are differentiated, building to a new economic model—the Net Economy.

Evolution of the business environment

From the 40s through the 80s, businesses expanded their scope from local to regional, from national to multi-national. Along the way they built offices, shops, service centers, and warehouses—the bricks and mortar of trade.

Business environment

Local / Physical  Global / Virtual

This orderly expansion was shaken up by the advent of borderless, global operation using a virtual presence—the Internet web site. Business connections now operate continuously as they span Earth's time zones—with as much power and as little physical restriction as a modem. To many, this new environment seems unreal. However the bedrocks of business—strong information channels, customer loyalty, and reliable service relationships—remain familiar. They have only been recast in a new light.

- To what extent is your business local/physical versus global/virtual?
- Could your information channels bring you richer feedback?

Evolution of asset definition

In the traditional view, assets were a tally of property, inventory, equipment, and material—tangibles that expressed the worth of an operation. An item's value related to its cost and its ability to generate income. Accounting was satisfying and reliable.

Business assets

Tangible  Intangible

Now intangibles—knowledge, experience, and relationships—move to center stage. In a world defined by customer loyalty and personalized service, the ability to develop and maintain a customer base creates significant value. The resulting growth in perceived assets can be dramatic. For example, as of early 1999, Amazon.com—a master of intangible assets—has a market capitalization 30 times annual sales, compared with a 0.35 ratio for General Motors, a company relying on tangible values. Amazon is not alone—eBay, Inc. has a ratio over 400.

- Has your business defined its knowledge base?
- Have you treated as an asset your expertise in applying technology to customer connections?
- How strongly does your business view customer service as a valuable asset?

Evolution of the rate of change

Improvements in process, products, and organization are common responses to changes in business conditions. Periodic inspiration and technological innovation had settled into a pattern of model years, quarterly introductions, and semi-annual updates.

Business change

Periodic  Continuous



Now change has become continuous. Rapid technological improvements feed on themselves. Concurrent development and marketing rule the day, as information flows non-stop between customers and enterprise nerve centers. Intense competition demands real-time response to customer requirements. For example, online media companies hold reader attention with continuous news updates—filtered to match users’ stated (or observed) interest patterns; and web shoppers can give immediate feedback on their experience.

- Do you define your enterprise by response times or product update schedules?
- Do job descriptions maximize the importance of creative, dynamic response?
- Do you plan technology investments for continuous deployment on high-priority business processes?

Evolution of production

Mass production of standard items has yielded to increased market segmentation, shorter set-up times, and more flexible manufacturing techniques. Mass customization of product versions has brought new economies of scale.

Business production

Mass Production  Mass Customization  Mass Personalization

E-commerce, which takes advantage of massive stores of real-time information about customer preferences, has spotlighted the value of precision targeting. Profile-driven personalization delivers tailored products, pre-selected information, and custom services on a massive scale. With the flexibility of the Internet, your business can present itself differently to each customer—on every visit to your site.

Examples abound. Ford Motor Co., the hero of mass production, now aims to deliver, within two weeks, a customized car whose price and features are dynamically driven by customer location, needs, and preferences. Levi Strauss has a database of jeans specifications for millions of individual customers, who can now say, “Please ship me a new pair with the same fit as before.” Publishers and financial firms deliver news and stock quotes in an infinite variety of patterns to satisfy the expectations of millions of registered users.

- Does your company use customer profiles to target marketing and product delivery?
- Can your customers define the way they work with you?
- Can customers look up their own account information?

E-commerce is the use of the Internet to conduct and support business transactions. The Net Economy is the business environment created by networks of enterprises conducting e-commerce. By joining the global electronic network, enterprises in the Net Economy confront new challenges and enjoy new opportunities.

The new way businesses compete and succeed

Traditional differentiators in this burgeoning market have been weakened as success in the Net Economy moves beyond price, cycle time, and quality.

- **Price** differentials have been crushed by global competition. A business used to have tens or hundreds of competitors; now it may face tens of thousands, whose prices are often posted for easy comparison, including those made by web-surfing software robots.
- **Cycle times** have been cut by revolutionary design, production, and delivery techniques that everyone can use.
- **Quality** has risen to meet extravagant customer expectations. Modern quality-control techniques allow any company to compete on the basis of quality.

Superior service is the new way to build a sustainable competitive advantage. Service is the most powerful force for attracting and retaining loyal customers. When customers find exceptional service, it becomes a powerful tool that persuades customers to conclude: “I like doing business with this company.”

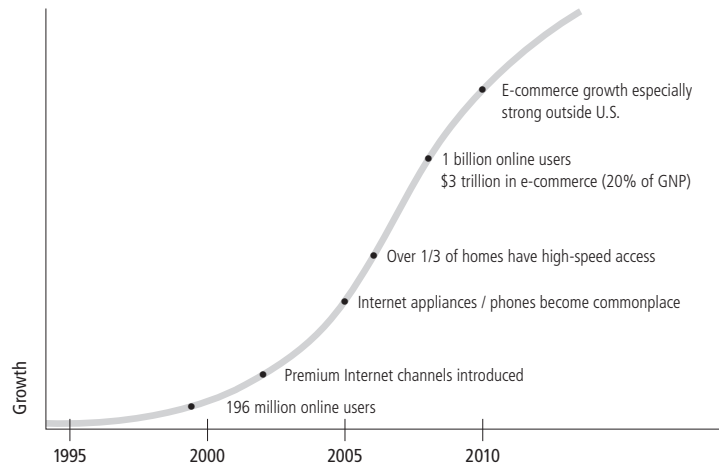
Explosive Growth to \$1 Trillion

Online revenues growth has quadrupled each year. In 1998, it totaled \$35 billion inter-company and \$15 billion retail, worldwide. In 2000, out of 256 million users, 53 million buyers will average \$4,090 each in e-commerce business (combined inter-company and retail). By 2003, online revenues will exceed \$1.3 trillion.

Source: International Data Corporation Internet Commerce Market Model, March 5, 1999.

HOW BUSINESS MARKETS HAVE EXPANDED

History will show that the dramatic growth of the Net Economy in the late 1990s will pale in comparison to what will come in the next ten years. E-commerce is in its infancy. In the United States alone, e-commerce in 1998 reached \$50 billion—and is on track to double in 1999. Projections indicate that it will exceed \$1 trillion worldwide by 2003, and it's not difficult to imagine revenues surpassing \$3 trillion within a few more years.



Net Economy Milestones

Web Shopping Devices Mushroom

Low-cost PCs, Internet appliances, and personal portables are selling in large numbers and stimulating e-commerce with their convenience. As early as 2002 there will be over 85 million smart handheld devices in the world, with the number continuing to rise rapidly, according to the IDC report "It's a Small World: Worldwide Smart Handheld Devices Market Review", November 1998.

Strong, self-reinforcing trends are driving the expansion of e-commerce:

- Exploding numbers of users
- Increasing ease and speed of communication
- Accumulating success stories and learning experiences
- Encouraging government policies
- Increasing corporate e-commerce investments

More users log on each month

The worldwide user population is estimated to reach 196 million in 1999, according to International Data Corporation. The increasing popularity of user-friendly NetTV boxes, Internet appliances, and inexpensive handheld devices, such as PDAs and smart phones, accelerates user growth exponentially. The number of users is expected to reach one billion by 2008.

How many users do you expect to reach with your e-commerce initiative?

In view of the explosive user growth, have you aimed high enough?

Communications get faster

Telecommunications companies are investing in long-haul and local infrastructures to give higher speeds for larger numbers of users. High-speed telephone lines, fiberoptic connections, and Internet-by-cable are increasingly available. Following the lead of computer marketers, an increasing number of Internet providers offer free devices as part of marketing and service packages. Private company-to-company Internet connections, called extranets, are growing—fueled by the demand of trading partners for simple, fast, reliable, and secure transactions.

How could you expand the scope of your corporate extranet to build strong personal relationships with key customers and streamline your supply chain buying process?

Success stories proliferate

High-profile e-commerce successes by pioneers such as Amazon.com, Dell, eBay, and Cisco show what can be done. These examples excite the press and draw talent. Success models educate the marketplace and inspire emulation. As corporations learn what works well, sales techniques are refined and online commerce activity increases. Pioneers gain insights on ways to make e-commerce faster, better, easier, and more secure. This knowledge overcomes old boundaries of theory and practice—and builds real competitive advantage.

Do you have an idea for an e-commerce initiative that could redefine the way people use your products or services?

How does your company encourage Internet talent?

What incentives do you offer to attract and retain experienced people?

Government policies favor e-commerce

Relief from sales taxes in the United States and a “let-it-be” approach encourage innovation and create an Internet environment that stimulates product development, marketing initiatives, and industry growth. Encouragement also comes from the way the government itself uses the Internet to disseminate information and purchase goods.

Corporate investments help propel the market

The e-commerce market is being driven by increasing corporate investments in hardware, software, communications systems, and e-commerce talent. Software vendors feel the pulse of corporate spending and compete to provide ever more sophisticated offerings that increase capabilities and streamline deployment.

In what area do your company's e-commerce investments have the greatest potential to supercharge your business?

HOW THE NET ECONOMY CHANGES THE BUSINESS MODEL

The old model

The familiar supply/demand business model made sense. At its heart was the enterprise, adding value by manufacturing products or providing services. Back-office operations connected to the supply chain for purchase of raw goods and services. Separate front-office operations concentrated on putting goods or services through the demand chain.

As the pace of business quickened and became more complex, the lack of real-time information flow between front- and back-end operations became the central constraint.

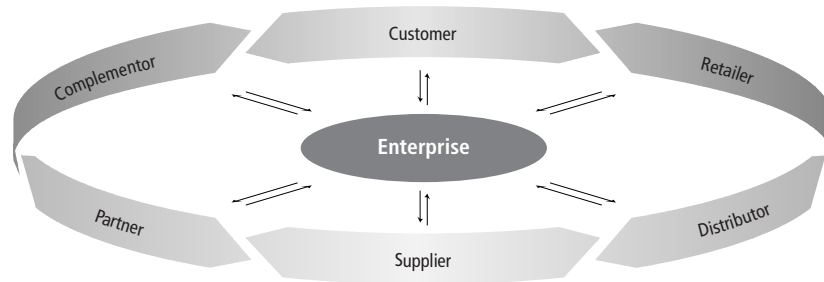


Old Business Model

The growing popularity of outsourcing and just-in-time inventory increased the need for change—just when the Internet introduced low-cost, universal communications.

The new model

In the business model for the Net Economy, webs of high-speed communication connect companies so they can simultaneously perform multiple roles—supplier, customer, and partner. A key feature of this model is the timely flow of information, both automated and mediated.



New Business Model – An integrated value chain thriving on rapid information exchange.

Communication needs come from all sides. A manufacturer needs to know that a contract supplier monitors inventory and replenishes it automatically. A customer needs to know how to specify exact configurations for an order and schedule delivery—without waiting to connect to a person in the call center.

This multi-dimensional model of cross-communication replaces the old linear model with expanded enterprise relationships. Today, for example, Home Depot's order department can collaborate with Nextel to automatically notify contractors via Nextel cell phones that building-material orders are ready for pickup. This illustrates the concept of "complementors". The relationship expands both businesses.

Business-to-business e-commerce exploits the fact that almost every business is connected to the Internet in some way. To take advantage of this universal connectivity, enterprises are upgrading and extending their internal systems to allow exchange of essential business process information such as parts, prices, orders, inventories, production schedules, payments, preferences, and shipments.

Business-to-consumer e-commerce lives with the threat that competition is just a mouse click away. Corporations build market advantage on well-designed, personal electronic interactions that bind customers through data-rich services. Formerly private databases now invite customers to review order status, inventory availability, account history, shipping status, FAQs, and custom catalogs. Satisfaction comes from information, entertainment, and need fulfillment.

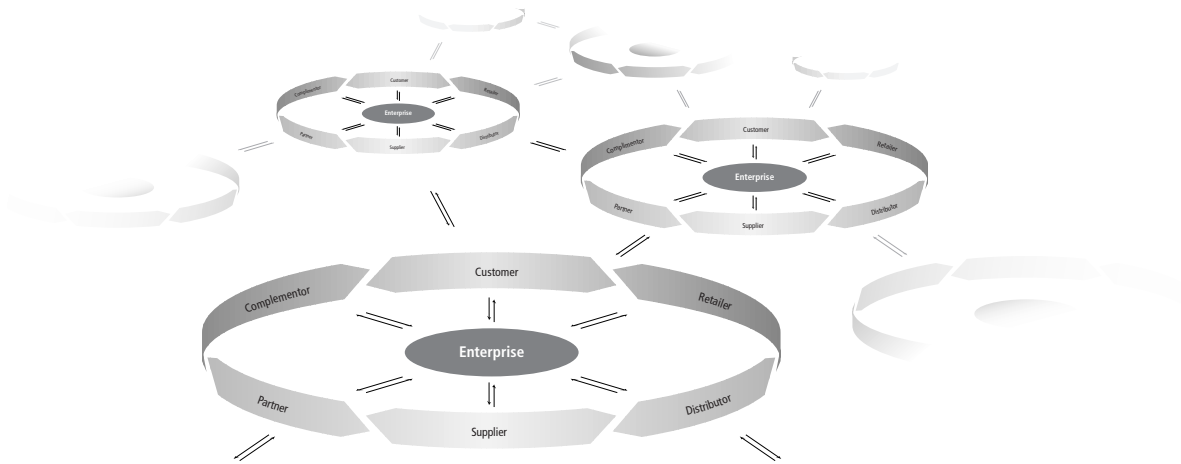
A complementor is a firm with information that can give you a competitive edge if you establish the right relationship. For example, Century 21 is a complementor to AT&T by giving it house-sale information for phone service sales leads.

Benefits of the Net Economy

Firms that evolve to the Net Economy become stronger competitors, characterized by:

- The ability to rapidly improve products, services, and customer relationships
- Labor cost savings from the efficiency of web-based self-service information and transactions, available from any time zone around the world
- Greater efficiency and fewer mistakes from timely information, seen directly by anyone in the firm who needs it instead of passing through slow, error-prone human relays
- Increased customer loyalty from a focus on customer relationship management across the entire life cycle, using techniques such as real-time dynamically customizable web-pages created from self-generated preference profiles
- Best prices and terms with flexible, open-system data formats, which make it possible to shift among numerous suppliers

What knowledge stores has your company accumulated that could galvanize your moves toward greater efficiencies, and new relationships, products, or services?



Net Economy Business Environment – Networks of new-business-model enterprises conducting e-commerce.

HOW TO PROCEED

E-commerce is new, it's big, it changes everything we know—and the opportunities for getting in on the ground floor are slipping away.

The new business model calls for new skills. The processes and strategies of the networked business environment are likely to continue to evolve—seriously challenging the creativity and flexibility of generations of business leaders.

Now that everybody is linked to everybody else, the challenge becomes managing the flow, controlling the content, ensuring the security, and facilitating the use of huge amounts of information.

A commitment to e-commerce requires an abundance of vision, perseverance, and capital—with all-out support among top management. How can you, as a responsible manager, move into the uncertainty of such new operations? The answer brings us back to teamwork and partnering, key talents in the Net Economy.

Lessons from experience with many projects show seven steps in the process:

1. Quiz managers and operations staff.
2. Establish objectives.
3. Gain secure funding and visible management support.
4. Develop stakeholder consensus and buy-in.
5. Build a multi-functional team.
6. Prepare the business case.
7. Plan the detailed implementation.

1. Quiz internal stakeholders about current work processes.

Ask for views on which products, customer groups, and processes are ripe for seizing the customer-first opportunity. This helps ensure that plans are the best they can be—and begins to develop buy-in down the line. Get help from marketing visionaries and operations people who know how information flows. Highlight potential conflicts and opportunities. Notice what others in the industry are doing.

2. Set objectives for the e-commerce initiative.

Make a short list of measurable items—and be realistic about the timeline. Expect a number of discrete “chunks” of accomplishment before the grand vision is realized. Work in teams, with help from experienced planners to define assumptions, business events and rules, and critical success factors.

3. Ensure visible executive support and get funding in place.

Nothing can replace a supportive visionary executive. Get a sponsor on board as soon as possible to help articulate the e-commerce vision and develop a mental model that everyone can support. High-profile funding legitimizes the project and engenders enthusiasm for change.

4. Build consensus and get enthusiastic buy-in.

Listening and responding never stop, so hold stakeholder workshops to vet the vision, air concerns, set clear priorities, and discuss models for customer-focused operation. Use workshop experts and set up regular progress reports. As buy-in proceeds, bring customers and partners into workshops.

5. Enlist a cross-functional team.

Start with a strong project leader and recruit representatives from many departments including sales, marketing, operations, and IT. Build on their perspectives and identify issues for early treatment. Here's where enlisting experts and veterans gives critical leverage to avoid costly pitfalls and speed the process.

6. Develop a detailed business justification based on the metrics of success.

Include a business assessment and schedule covering long-term justification from profit increases, productivity, and cost savings. These gains are likely to be foreshadowed by early signs of "non-dollar" progress such as reduced complaints and increased online usage by customers, prospects, and partners.

7. Create an implementation plan.

At the next level of detail, teams work in parallel on pieces of the project. Get experts to maximize integration with current systems, define architecture, develop infrastructure, and plan applications. Evaluate packaged software solutions and determine the right make/buy/tailor mix. Be precise about milestones and inter-group dependencies. Identify phases with pilots and prototypes. Continually measure for success, and redesign as you learn.

Netscape Professional Services

To help your projects proceed smoothly, consider the advantages you can get from working with Netscape Professional Services.

- **Deep knowledge** of e-commerce application software—as would be expected from the Internet pioneer. Netscape has matured with the development of an extensive line of infrastructure products, tools, and e-commerce applications. Netscape is dedicated to open standards to maximize customer flexibility and ease of systems integration.
- **Experience in planning, building, and deploying** complex installations, in diverse situations, for major players in a variety of global industries—as well as the highly trafficked Netscape NetCenter and the popular online Netscape Store.
- **Flexible teams, skills, and business partners** with the training, expertise, and knowledge needed for every part of the planning, development, and deployment process.
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