

Service Providers ASPs, ISPs, MSPs, and WSPs

A Wiley Tech Brief

Joseph R. Matthews
Mary Helen Gillespie

Wiley Computer Publishing



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she epitomizes excellence
as a service provider
at the Information Desk
in the Carlsbad (California) City Library***

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Introduction

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This book is a guide to Internet-enabled services from a technology and business perspective. While the landscape of technology-related services is ever changing, several have emerged as key players in the service provider market—Internet service providers (ISPs), application service providers (ASPs), wireless service providers (WSPs), management service providers (MSPs), and other xSPs. These service providers allow businesses to outsource Internet, software, and other technology needs ranging from email and faxes to enterprise resource planning (ERP) and customer relationship management (CRM) in an easy, cost-effective, and efficient manner. Alternatives to in-house technology can serve to tighten internal control over the total cost of project ownership while creating a managed, secure, customer-centric infrastructure.

This book will point out commonalities, highlight enabling technologies, and develop guidelines for strategic partnerships between various service offerings. Trust is a critical selling point in convincing management of any business or organization to transfer important in-house data to an outside provider. The decision makers must be certain that a service provider can demonstrate that its infrastructure is better, faster, and cheaper than one the organization can produce internally. To win the business, the service provider must provide professional staffing, first-rate equipment, and proven procedures, in addition to computer processing and network capacity. To keep the business, it must under-promise and consistently over-deliver.

Security has been cited in some groups as managers' number one concern when it comes to outsourced technology. As risks can never be eliminated entirely, it is up to service providers to address all potential points of failure and to their customers to decide how much risk is acceptable. This includes physical threats such as fire or theft and technological risks like a system

breach by hackers. This book will help managers evaluate these risks and determine if the mitigation strategies will reduce the risk to acceptable levels.

A *customer* is an organization (business, institution, government, etc.) that subscribes to services offered by the service provider. A *service provider* is an Internet-enabled business that offers an outsourcing alternative to customers for some or all of their business functions. An *end user* is a person like you or me at a desktop who must call the help desk when some system or software is nonfunctional. A *vendor* provides a piece of software, hardware, or system, without the ongoing relationship offered by a service provider.

Successful service providers must help their customers to equip internal teams and external partners with cutting-edge tools that reach customers with a seamless continuity and competitive advantage. A few years ago, many of these service providers did not exist. A year from now, who knows? But the service providers that survive and thrive will be the ones that go beyond the terms of their service level agreements with customers. They will act as strategic partners instead of outsourced vendors, embrace a passion for innovation and forward thinking, and volunteer to help create global best practices and industry standards.

Overview of the Book and Technology

Customers demand their technology to be *high-speed, highly available, scalable, and far-reaching*, but organizations often lack the internal resources to provide these cutting-edge technology solutions. This creates increasing demand for third-party sources of reliable, trustworthy information on technology-based business decisions leveraging the Internet. Many industry observers forecast that the market for a variety of service provider offerings will grow exponentially and exceed \$100 billion in the next five years.

The generally accepted wisdom about handling strategic functions internally and outsourcing the rest is easily torn apart after just a quick look at what should be the most strategic functions in any company: those that affect customer relationships directly—sales, marketing, and customer service. Yet companies routinely outsource any or all of these activities. Independent distributors or commission-only sales people handle sales; companies use ad agencies for some or all of the marketing activities; and there are a number of call centers that handle everything from telemarketing to technical front-line software support. Thus, to date, strategy and outsourcing have had no correlation.

Benefits of outsourcing applications include the following:

- Enabling information technology resources within a company to focus on more strategic projects

- Lowering up-front costs for implementation of business applications, which usually lowers the overall cost of ownership
- Creating a more predictable cost model
- Facilitating reduced implementation time for applications, which results in more rapid access to the desired business functionality

Technology-related business models are complex and demand significant planning to integrate all of the required processes. As IT managers begin their requirements analysis for a new software project, they inevitably ask themselves: “Do we build an application ourselves, purchase a third-party software product, or partner with a service provider?” Partnering has become a general requirement in today’s business environment, demanding the seamless integration of processes and the unity of service-level commitments. To convince a potential customer to transfer important data, the service provider must be able to demonstrate to the customer that it has professional, first-rate facilities.

Managers should expect their technology outsourcing partners to deliver the following:

- Integrated and proactive processes for system, application, network, and service level agreement monitoring management and reporting
- 24/7 call center support
- Full data backup
- Off-site storage of backup media and disaster recovery
- Web-based, self-provisioning account management (adds, changes, and so on) and support
- Regular, professional maintenance and upgrades of all application software and server hardware

How This Book Is Organized

Readers should have a basic familiarity with the Internet and Web-enabled technologies such as email as well as a comfort level with team building and customer relationship management concepts.

Chapter 1 provides a discussion of the factors that favor the rapid expansion of the service provider marketplace as well as a general overview of the service provider industry.

Chapter 2 discusses the various Internet-related technologies that are enabling the exploding use of the Internet and some of the innovative uses of the Internet that benefit businesses and organizations.

Chapter 3 discusses Internet service providers, perhaps the most familiar of the service provider models. ISPs maintain networks linked to the Internet via

high-speed dedicated communication lines. An ISP offers the use of its system to companies and individuals, which, for a fee or through advertising support, are able to connect to the Internet via modems or maintain Web sites or Web servers that Internet users can access. The ISP model ranges from mammoth enterprises like AOL to small mom-and-pop companies with local ISP access.

Chapter 4 focuses on application service providers, which aim to allow businesses to outsource their software needs via an Internet browser in an easy, cost-effective, and efficient way. ASPs manage and deliver application capabilities to multiple users from a data center across a wide area network. The ASP community has carved out an emerging marketplace where the software and telecommunications industries converge with critical information management tools.

Chapter 5 examines wireless service providers. WSPs allow Internet access that involves sending and receiving specific information such as personalized news and email via technology such as Wireless Application Protocol (WAP), Bluetooth, and Voice XML.

Chapter 6 concentrates on management service providers, which deliver IT infrastructure management services over a network to multiple customers on a subscription basis. An MSP can provide security or network management, which is not an application but a best-practices method, and the technology resources enabling it. The MSP helps allow an IT staff to focus on a higher level of development for its business organization to be more competitive. The MSP takes on the role of handling the day-to-day operational tasks, providing the IT staff with the information to make business decisions.

Chapter 7 outlines the offerings from a plethora of other service providers. In this chapter we focus principally on four groups of xSPs: hosting service providers, infrastructure service providers, Internet telephony service providers, and content service providers.

Chapter 8 provides information about the importance of service level agreements. An SLA defines the responsibilities of a service provider and the users of that service. It also identifies and defines the service offering as well as the supported products, measurement criteria, reporting criteria, and quality standards for the service. Dispute avoidance and resolution techniques are discussed so that when conflicts arise, the parties can avoid costly and lengthy court hearings.

Chapter 9 discusses a number of concerns businesses have raised about using an xSP, principally security and system availability issues.

Chapter 10 discusses the options for choosing a service provider. Several checklists are provided to assist the reader in selecting a specific type of service provider.

The authors have attempted to minimize the amount of jargon found in this book, but some use of acronyms is almost inevitable. A glossary is provided so that readers who are unfamiliar with all of the jargon they are likely to encounter when considering use of a service provider will be able to quickly understand the terminology. An appendix also provides information about additional resources for various xSPs.

Who Should Read This Book

This book is ideal for senior- and middle-level managers in marketing, sales, finance, and human resources departments. The goal: higher sales, better marketing tools, up-to-date HR records, and tighter supply chain controls through the outsourcing of technology functions that improve an organization's ability to plan and execute strategies focused on core competencies.

There will be instances when a business or organization will want to own software, maintaining direct control. The total ownership model will be the best solution for some, while other organizations will continue to outsource certain areas like accounting and back-end office support. But for many organizations, the costs of ramping up and running a new application are going to outweigh the pleasures of ownership.

Nothing new here. Think about paychecks. Thousands of companies for decades have outsourced payroll functions to service companies like ADP with nary an ounce of guilt or a second thought. In the payroll business, organizations didn't, and still don't, want to chuck time, money, and bodies down a big black hole building a state-of-the-art payroll system.

Now, extend this train of thought to the new economy and do the math. Management teams who are building cutting-edge, in-house email systems are not building cutting-edge deliverables to bring to market.

Every IT department is tremendously overburdened right now—even those immune to the skilled labor shortage who are operating fully staffed. The internal IT teams can't begin to support all the projects and programs driven by the competitive demand for technological innovation and initiatives from the legal, procurement, or marketing departments, never mind develop them. Although a number of companies will consider using a service provider only to outsource noncore business functions, it is also true that some organizations have no qualms at all about outsourcing important core business activities to a service provider. While it is possible to outsource non-IT related functions, like market research, office services (printing, presentation development, and Web-based distribution), and many others, a discussion of these latter options is outside the bounds of this book.

“The ability to get IT involvement in a project is very, very difficult, yet the need is crucial. And getting more crucial as competitive trends increase,” says Paul D. Mann, CEO of Informative Inc., a California-based ASP that provides online performance measurements by surveying customers and employees for Fortune 1000 companies like Cisco Systems, Nortel, and 3Com. Those companies certainly have the internal resources to do their own market research. But they use Informative’s real-time Web channels because, as Mann says, “it’s not in their best interests with the rapid pace of change to support and upgrade” internal market research technologies. “I like to tell our clients that we are virtually the department down the hall,” Mann says.

Note that pricing models are still immature in the service provider marketplace; however, with a bit of effort it is possible to do some comparison shopping. Managers should do a cost-benefit analysis that measures labor and capital costs along with the actual costs of hardware and software. The savings also come from an accounting perspective. Leases or rentals are entered over time as business expenses whereas actual purchases of software are recorded at the point of sale as a one-time, and usually huge, capital expenditure.

What is created when a service provider is used effectively is an internal technology team that is able to enhance products and improve time-to-market and customer relationships.

If you are considering a service provider, just think about how many bodies you won’t need to recruit in this cut-throat hiring environment. Many organizations outsource noncore operations to companies whose own core competencies, enhanced by economies of scale, are faster and cheaper than any internal team. That allocates, in theory, more funding to staff marketing, sales, manufacturing, and the other business lines.

Summary

Decision makers at organizations seeking external technology options to manage traditional internal functions and customer channels should not find the relative newness of the service provider industry a deterrent to its use. This book will help you to develop the processes and hire the people to create service provider partnerships that supersede your company’s standards of excellence and take advantage of the lower costs resulting from technological economies of scale.

For those involved in the service provider industry there is an enormous opportunity to partner with other xSPs so that each company is able to extend its offerings to different market segments. In order to do so it is important to recognize that the partner organizations but most importantly for the customer of the xSP.

Overview of Service Providers

Existing Internet-based technologies continue to evolve and new technologies are continuing to be introduced, seemingly on a weekly basis, despite the dramatic dot-com fallout. In today's competitive global marketplace, businesses of all sizes—from home-based ventures to Fortune 100 enterprise leaders—are turning their primary focus away from the traditional model of creating and delivering products and services to a targeted audience. Instead, organizations increasingly view customer relationships as the key strategic tool to success.

Intellectual capital and technology are the main drivers of this business model, which demands 24/7 access to all resources. Boundaries and borders are eroded, as the Internet becomes The Network of Choice for more and more businesses and organizations that now rent software over the Web rather than buy shrink-wrapped packages. Interoperability is the “inter-” of the Internet, and increasingly software is being developed for a net-centric view of the world.

Internet-enabled technology has become the latest tech commodity, prompting organizations to rely even more on their intellectual assets to affect competitive advantage. To maintain that edge, decision makers hesitant to invest significant capital in ever-changing technology applications choose to out-source the organization's technology needs. These service providers, whose product can range from a simple email package to a universal end-to-end-solution, promise to provide and safeguard their customers' data as if it were their own. Ideally, these service provider offerings interact seamlessly with

desktops, servers, and other computers to sculpt an invisible channel where information flows freely, quickly, and efficiently.

According to some analysts, worldwide spending on IT outsourcing will top \$100 billion by 2005, starting from a base point of some \$46 billion in 2000. Outsourcing is nothing new to the network and system sides of information technology management. What is new, and what is revolutionizing the vendor-client relationship in IT, is the outsourcing of application and database layers by maximizing and leveraging Internet connections. The result: technical, organizational and financial touch points that impact the value chain of the entire organization.

The main benefit of outsourcing, which will be repeated many times throughout this book, is the liberation of the internal IT staff to spend less time on keeping less critical applications running and more time developing new and innovative IT solutions that reflect the organization's core competencies. By leveraging the current in-house IT staff in a more effective manner, organizations can expect, in theory, to reap increased efficiencies and economies of scale.

Neither partners nor vendors, service providers create a new level of relationships for managers across all lines of business. Within the organizations, executives who formerly relied on the rigid rules of vendor contracts now find themselves managing a service agreement often promising more intangible benefits than actual return on investments. For service providers, creating the correct set of individual customer expectations with mass-produced technology is a delicate juggling act demanding considerably more face time with end users than ever before.

Managing in Turbulent Times

Clearly, the rather quick downturn in the economy is causing all organizations to take a fresh look at their situation. As resources dwindle across the board, management faces higher risks to the company's reputation, operations, and security, especially regarding key financial and customer service strategies.

And despite a legacy of consistent best practices driven by profits, growth, and regulatory guidance, many businesses and organizations are confronting organizational chaos. This is not the time to ignore mission statements, strategic goals, and project implementation plans. It is the time to reassess the core competencies of the business unit, quantify its value in this new paradigm, and determine whether any task or process could be more efficiently outsourced.

The effective cross-organizational relationships that have driven successful team projects over the last five years must be protected and fostered. And the

value of each individual's past, present, and future contribution is assessed. These tasks, hampered by bottom-line demands for profitable or at least break-even numbers, are daunting.

We all know the right mix of qualitative and quantitative tools to help reach the best plan of action for layoffs, reductions in force, or other shutdowns. Metrics and matrixes, though, often tend to address solutions to the current failures. They help us dig out of the mess we are currently in, and they end once the digging stops. These immediate solutions tend to exclude factors that may enable or lead the newly retrofitted organization to its next set of goals.

And this is very, very important to remember as the pink slips start to fly: The current strategies have already failed. They are useless save for their educational and historic value. It is the future strategic plans and their subsequent implementation that must succeed and, indeed, may not fail.

So how can managers effectively link their organization's cultures to these new visions?

First, assess the *human capital*. What is the value of an organization's employees? Does their experience and collective wisdom make a meaningful difference? This goes beyond body count and back-end systems. Who are the most valuable team members? They are the talented individuals who are leaders as well as players and, most importantly, willing and able to share their expertise. No hoarding, no back stabbing, no limited disclosures.

It is not really fair to look at numbers and quotas to determine these levels of success. Adjustments must be factored for extenuating circumstances like the nascent Internet-driven technologies that stormed the U.S. workplace over the last five years. Example: The business-to-consumer (B2C) market in a pure-play Web-enabled channel that is not viable for most companies. We all know this now. But for those that experimented, tested and tried it, there was a huge learning curve whose end result found employees invested in learning, adapting, and using emerging technologies. End results: business management tools that help them do their job more easily, faster, and more cheaply. Individuals who lamented in 1997 that they were afraid of computers are not only excelling in the use of technology in their daily professional lives but using it in their personal lives as well to connect with family, friends, and special interests.

Managers need not only to practice but to excel at this ability to share and expand intellectual capital. This requires scrupulous acceptance and encouragement of innovation, plus the freedom to work without fear-driven directives.

This brings us to our second point: *communications*. A truly successful organization has very little internal information muzzled in a "need-to-know-only" directive. Questions pop up, answers are found, and there is an open, expansive

sense of verbal engagement. Employees, mindful of competitive and regulatory boundaries, have access to all educational, training, and developmental material necessary to their jobs. Communication flows easily in all directions—horizontally and vertically—regardless of the emotions they might raise. People don't want to base their professional lives on rumors that live for weeks or months. They want, and expect, the facts, no matter how ugly. But once words like “lay-offs” and “buyouts” start to become part of the everyday vocabulary, they crowd out the effective work language. Managers and employees alike must be able to voice as well to criticize the truth as they may see it and be respected for its intention as well as its content. The days of the yes-ing ourselves into compliant numbness are officially over.

Hence, our third point: *experience*. It is extremely common to find an employee under 45 with a total work experience of nearly 20 years. But it is not as common to find employees under 30 with the same relative scope or depth of experience. About six months ago, right when this current new economic meltdown was just starting to sizzle, the pundits started heralding the Return of the Suits to the dot-com arena. The experts applauded the replacement of those smart-aleck whiz kids that dropped out of Stanford and Harvard MBA programs before they mastered a ROI spreadsheet to start these dot-com dreams juiced by millions of VC funds. The applause, however, was a tad tardy. It was appropriately too late.

The goals of the massive corporate restructuring we now see must not correct the past, but create the future. To achieve those goals, management must assess its current human capital resources and find innovative ways to leverage and maximize its technology-enriched workplace teams.

Trends Affecting the Service Provider Market

A number of trends are affecting businesses and other organizations. These trends can be broadly grouped into four categories: economic trends, technical trends, business trends, and value-added trends; they are shown in Figure 1.1.

Economic Trends

There are three key economic trends:

Increasing competition. Businesses and organizations find themselves facing an increasing amount of competition due to the pressures of globalization and the ready availability of information via the Internet. Some organizations are willing to reengineer themselves in order to capture a greater share of the marketplace and dot-com companies are splintering barriers to competition.

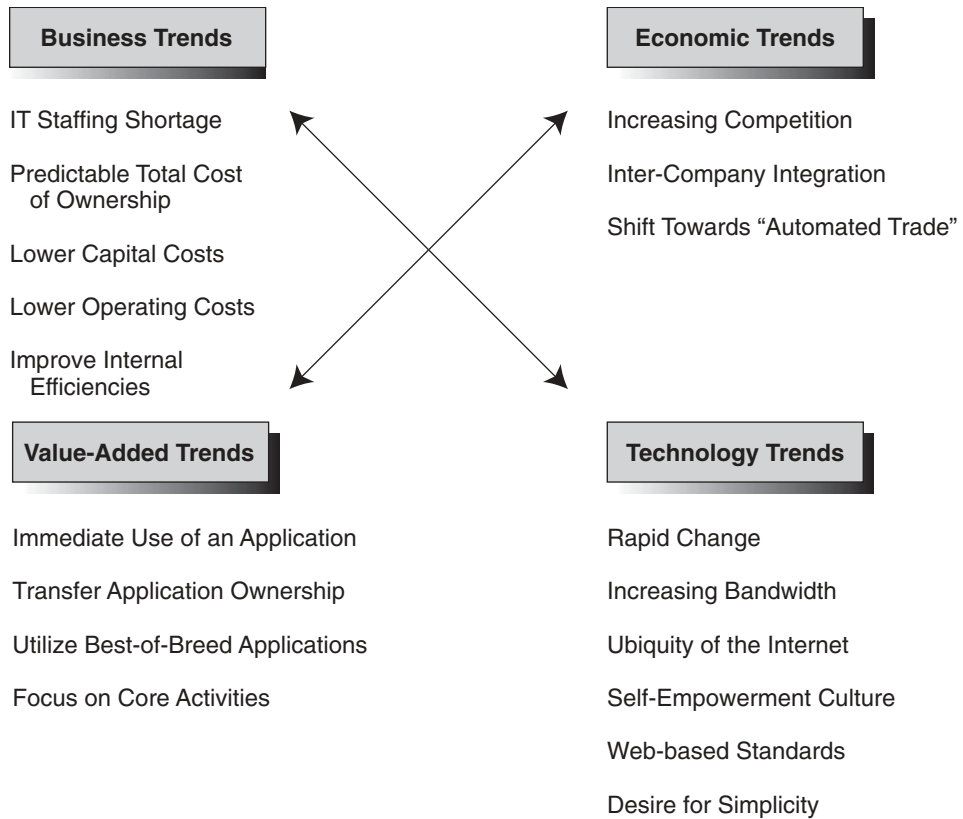


Figure 1.1 Trends affecting the xSP marketplace.

To counter this increased competition, some organizations are asking themselves, What is it about our products or services that is really essential? How do we really add value? Once these critical activities are known, then these organizations are shedding responsibility for the nonessential activities or functions by outsourcing those activities or functions.

Intercompany integration. Organizations are moving not only to integrate their own systems but also to integrate with the systems from other companies, especially suppliers and customers using an Extranet. A lot of this intercompany integration is using XML to tie these disparate systems together.

Shift toward "automated trade." Software is becoming smarter to allow it to stand in the middle of transactions—in place of employees. Automated trade takes place in many forms, including business-to-business (B2B) and business-to-consumers (B2C) portals.