



Decision-Making In The Eye Of A Hurricane

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Introduction

There has always been something special about “emerging” professional services organizations (PSOs)—roughly defined as firms that have more than 50 employees, but are smaller than 1,000 employees. More often than not, the founder(s) had a bold vision of the future and a go-for-broke commitment to innovative client solutions. For people drawn to this kind of environment, life tends to be chaotic, but also highly rewarding—especially during the early years. Almost overnight, however, everything can change. Just think back a few years ago, when the economic bubble suddenly burst and the dot.com era stopped dead in its tracks. For many PSOs, the climate shifted from one of unlimited potential to survival of the fittest. It wasn't pretty, but your own organization made it through the hard times. Everyone from the CEO on down now wants nothing more than to reclaim the momentum that has been lost.

There's just one catch. As one of the people who makes a difference, you cannot help but realize how unprepared the company was when the downturn came. Do you charge ahead with the same reckless abandon that made everything possible in the early days, or do you plan for future growth knowing that the next downturn could be just around the corner? Every option you look at involves major trade-offs. It's like standing in the eye of a hurricane...*any momentary calm is just an illusion, and making the wrong decisions now could lead to unintended consequences in the future.*

There's No Turning Back

Considerable research has been published about emerging PSOs and the challenges they face when moving through the services lifecycle. David Maister, a former Harvard Business School professor and management consultant, provides a good framework for this journey in his 1993 book, *Managing the Professional Services Firm*. The primary goal of this white paper is to tackle the challenge facing many small to mid-size PSOs: *With a business model built on an inherent distrust of bureaucracy, how do you make smart, well informed business decisions without sacrificing the very ideals that define your corporate identity?* This is a delicate topic often debated behind closed doors, but rarely discussed in the open. Only in hindsight will some PSOs realize that what worked well in the past could prove toxic to their future. From this perspective, it helps to understand why dysfunctional behavior and poor decision-making seem to go hand in hand in so many fast-moving service organizations.

Obviously, managers do not set out to make bad decisions. In a fast-paced environment, decisions are often made with limited access to reliable data. Like a domino effect, each small decision touches everything in its path. Without warning, a gentle breeze becomes a raging storm, and suddenly you find yourself standing in the midst of a hurricane wondering how it all got started. Under the circumstances, trying to assess blame may be a pointless exercise, but human nature often takes us down that path anyway. What does matter is an ability to better predict the weather patterns so that early preventative action can be taken. If you can't stop the forces of nature, you can at least minimize the damage and the toll placed on human suffering. The same holds true for PSOs.

In Search of a Root Cause

When trying to isolate the root cause of poor decision-making, there are many factors to consider. While not the underlying cause of dysfunctional behavior, these factors can serve as catalysts that once put in motion can be difficult to stop. For many small to mid-sized PSOs, a short list of contributing factors likely includes:

- **Empowerment of people.** Management and employees alike place extreme value on creativity and flexibility in delivering client solutions. Seen as a true competitive advantage, any change in that philosophy is never taken lightly.
- **A deep-seated distrust of bureaucracy.** Many PSOs owe their very existence to innovative thinkers and visionaries. “Big business” bureaucracy may be the last thing in the world anyone wants to emulate.

- **Freedom from “process tyranny.”** The avoidance of rigid policies and procedures makes for a powerful recruiting message, and often plays a role in why highly motivated people join smaller PSOs in the first place.
- **Limited overhead and infrastructure.** This serves multiple purposes: (1) it minimizes bureaucracy, (2) it reduces unnecessary costs, and (3) it allows management to divert more money into employee incentives such as salary increases, bonuses, and social events.

The first thing that jumps out from this list is that the items on it appear to be highly desirable traits. By mixing all of these traits in a relatively free-form environment, however, the situation becomes ripe for dysfunctional behavior. How and why that happens is a topic worth exploring.

Learning to Live with Controlled Chaos

Over the past decade, a lot of innovation and breakthrough thinking has come from smaller PSOs, who are driven by the passion to make a difference. Tinker with that chemistry and the uniqueness of upstart PSOs may be lost forever. So the challenge becomes one of “controlled chaos” — keeping the entrepreneurial spirit alive, while providing management with the kind of structure and information needed to make good business decisions.

In emerging PSOs, that information often comes from homegrown or highly customized off-the-shelf systems that were cobbled together during the early start-up years. Now that the company is beginning to achieve critical mass, those systems are hopelessly outdated with band-aids being placed on top of band-aids. Keeping track of personnel records (skills, performance reviews, compensation, etc.) gets harder every year, and even the most free-spirited employees are looking for just a little more structure. Financial bookkeeping that was barely adequate in the past now shows signs of major fatigue as things start falling through the cracks. Accounts receivable are backlogged and hurting cash flow, and balancing the year-end books qualifies as a mini-series for “Mission Impossible.” Other parts of the organization also feel the pain. Sales forecasting, effective staff utilization, and tracking client deliverables all require serious management attention. The day of reckoning has finally arrived.

Establishing the Ground Rules

Unable to put this off any longer, senior management gathers to discuss options for improving the company’s infrastructure. The first action item is to define the criteria that will guide any investment decisions. After a lengthy debate, the following guidelines are adopted:

- **First and foremost.** Do not compromise the entrepreneurial spirit of the company.
- Make every effort not to impede the employees’ ability to deliver innovative client solutions.
- Take into account the mobile nature of the workforce. Accessing information from remote sites can be time-consuming, aggravating, and detrimental to serving the client.
- Minimize the amount of formal training required by employees, managers, and technical staff for any new systems.
- Ensure flexibility to address rapid growth and sudden changes in business, competitive, or economic conditions.
- Leverage the existing IT investment wherever possible.
- **Last, but not least.** Any new processes, procedures, or methodologies should be as transparent and user-friendly as possible for everyone involved.

Narrowing the Field of Options

With the rules of engagement now in place, a brainstorming session comes up with four alternative strategies to consider:

- Upgrade the existing suite of off-the-shelf and/or homegrown systems.
- Build a new suite of in-house systems tailored specifically to the needs of the company.
- Identify and integrate “best of breed” third-party systems, products, and services that support both front and back office environments.
- Identify a broad-based infrastructure solution with the highest priority going to seamless integration rather than “best of breed” functionality.

Having identified the options, attention shifts to a review of pros and cons. The **first option** (to upgrade existing systems) is quickly discarded as non-viable. While a “comfort zone” exists with current systems (despite obvious shortcomings), they have clearly outlived their usefulness. As might be expected, at least one manager votes in favor of **option two** (to custom build a new suite of in-house systems). Although tempting, management concedes that building industrial-strength applications is not within the company’s core competency. The **third option** (to identify “best of breed” third-party systems) is clearly a viable alternative. The biggest challenge will be ensuring that the multi-vendor environment can be fully integrated and supported over time. The **final option** (to identify a more holistic solution based on seamless integration) is very appealing, but several roadblocks exist. Many vendors in this market space do not cater to the needs of small to medium sized businesses. Also, the complexity and deep functionality of a total solution may go far beyond what a smaller PSO will require in the foreseeable future. After weighing all the pros and cons, option number three seems to be the default answer... **but then again, maybe not.**

Note: Sooner or later, every emerging PSO faces a similar challenge. If this journey still looms on the horizon for your own company, then what follows should be of immediate interest. If you have already made a commitment (for better or worse), then focus on the continued evolution of your IT infrastructure, and its ability to support business decision-making in the future.

Envisioning a Future without Boundaries

Before continuing down the path of infrastructure choices, let’s fast-forward into the future and see what life might be like for organizations that have already optimized their infrastructure for sound business decision-making.

Day in the Life of a PSO

Having survived the trauma of accelerated growth in an unstructured environment, the emerging PSO now possesses a clear vision of what lies ahead. Impulsive decision-making has been replaced with a people-centric view of the extended enterprise, which includes customers, partners, and suppliers. The entire management chain now operates under the assumption that systems and business processes exist only to serve the following objectives:

- Maximize the knowledge, motivation, and productivity of all people involved in services delivery.
- Ensure sustained growth based on a continual balancing of revenues, profits, and costs.
- Relentlessly pursue customer satisfaction as measured by customer purchase loyalty, formal client references, and referrals leading to new sales.

In keeping with this people-centric view, corporate strategy is executed at three distinct levels of the organization: (1) connecting people, clients, and partners, (2) empowering mid-level managers, and (3) ensuring the accountability of executive decision-makers.

Connecting People, Clients, and Partners

In the past, customer services were delivered in an ad hoc fashion, and the fine line between success and failure usually came down to the heroic effort of individuals, rather than the collective wisdom of the organization. In the future, rather than reacting impulsively to customer fears or pressures, the client delivery team proactively leads the client based on preparedness and the pursuit of measurable benefits. Rather than being managed at arm's length, partners and suppliers are treated as a natural extension of corporate resources with clearly defined roles, responsibilities, and accountability.

The most important catalyst at this level is the seamless sharing of vital information between delivery teams, clients, partners, and suppliers. Rather than operating as autonomous groups in the field, remote delivery teams take full advantage of the company's flexible infrastructure. Laptops, PDAs, Tablet PCs, smart phones, and other mobile communication devices easily access centralized, Web-based repositories needed to market, sell, and service client accounts. Role-based privileges and automated security features ensure that the company's intellectual property is protected while giving immediate access to all authorized users.

Productivity has been dramatically improved by integrating core business processes into the most commonly used applications. Because embedded processes are highly intuitive with online help features, resistance to adoption was kept surprisingly low. This also played a key role in accelerating the learning curve of new employees, who in the past were too often thrown into client engagements with a "sink or swim" mentality. A formal mentoring program also helps to preserve the corporate culture despite the rapid influx of new people.

- An unexpected benefit of process and data transparency was the steady migration from tactical solutions delivery to more value-added services. Time that had previously been spent coping with ad hoc delivery could now be used to educate both clients and partners, while focusing on business benefits (vs. problem solving). Training also followed a similar trend toward more people-based skills development. Because so many employees worked in the field, Web broadcasts became a regular event with emphasis given to client innovation, early warning analysis, and proven best practices.
- Since life in the field will always be fast-paced, communicating with peers and managers has assumed added importance. Out of necessity, the company e-mail system offers native support of calendaring, tasks, contact management, and instant messaging. Sophisticated virus and junk-mail filters help to minimize the frustration and wasted time of field staff, whether they have direct network access or a Web-based connection. Web-enabled chat rooms have also become popular for troubleshooting technical issues or solving complex client problems.
- In the past, a centralized Web repository for shared documents existed, but quality controls were poor and the sheer bulk of documents tended to overwhelm the most valued material. This caused employees to shy away from the repository altogether, preferring instead to rely on e-mail queries and personal contacts. A single enterprise portal strategy, however, has now been adopted for employee access to all relevant systems, including Web repositories with versioning controls. To encourage the repurposing of content, user-friendly templates can be easily downloaded, customized, and then shared for even broader adoption. Web links and "tags" are also routinely embedded in online documents to improve research and reference searches often needed for sales presentations, proposals, client deliverables, and so on.
- One of the biggest surprises was a realization that service delivery could be much better managed within the context of project management (or engagement/case management). At first the skeptics prevailed. The idea of adhering to consistent processes seemed at odds with the flexibility and creativity needed to delight the customer. Two things eventually broke that deadlock: (1) no one had a real handle on the effective use of people and talent across the enterprise, and (2) as a by-product of accelerated growth, the quality of client deliverables (often staffed with new hires) was beginning to suffer. In response to these challenges, mainstream tools and best practices were used wherever possible, but with a strong orientation to user-friendly templates and real-time status reporting. Even the tracking of billable and non-billable hours met little resistance, once employees understood the importance of maximizing the company's greatest asset (its people).

What the staff really needed, however, was more personal assurance that time tracking would not somehow “dehumanize” their value within the company or lead to micro-management.

Within a matter of months, virtually everyone saw a noticeable improvement in productivity and service delivery. Each new initiative, whether internal or external, became easier than the one before, mostly due to the widespread sharing of lessons learned. As ad hoc delivery gave way to repeatable project success, the ultimate winner proved to be the end customer. Rather than praising the tenacity of service delivery teams to overcome all odds, clients gained a deeper respect for the firm itself and the collective talent of its people.

Empowering Mid-Level Managers

In the past, mid-level managers often found themselves caught in an unofficial limbo. They were easily overshadowed by the company’s dynamic founders and visionaries, yet were still held accountable for aggressive sales and performance targets in an organization lacking any real structure. With little guidance from above or support from below, a natural tendency is to seek out at least some degree of personal control. Over time, this creates a pattern of behavior so engrained that it now shows up in everyday business jargon... less-than-flattering terms like *vertical silo mentality*, *protecting one’s turf*, *resistance to change*, and *The Peter Principle* in which people rise to their level of incompetence. Does anyone actually aspire to become this kind of manager? And if not, why are they so pervasive? Much like Mother Nature, this may have evolved into an environmental issue where all things are inter-connected. Even the most subtle change in ocean currents, water surface temperature, and trade winds can trigger the formation of a deadly hurricane. Mid-level managers might also find themselves surrendering to subtle, but powerful forces that seem beyond their personal control.

Again fast-forwarding into the future, that same mid-level manager role has been completely transformed. No longer sandwiched between spontaneous executives and do-whatever-it-takes employees, the mid-level manager finally establishes his or her identity as an effective Gatekeeper. This Gatekeeper performs two critical roles: (1) to help translate executive priorities and organizational strategy into action plans that can be carried out at the staff level, and (2) to monitor the performance, motivation, and career development of employees to ensure the continued success of these people and the clients they serve.

- Rather than *creating* barriers, the mid-level manager now plays a vital role in *eliminating* barriers that impede employees or senior decision-makers. Rather than blocking or sanitizing status reports that eventually roll up to executives (who then make decisions based on faulty data), the mid-level manager helps to protect the integrity of this data at its source. In a quality assurance capacity, he or she makes sure that real-time information systems transport all performance data untainted throughout the chain of command. This scenario triggers another event that could forever change the chemistry of emerging PSOs, which focuses on the “accountability” of mid-level managers. The constant chaos that surrounds smaller PSOs has always provided ample cover for mid-level managers, who have intentionally chosen to promote self-interest over the good of the company and its clients. As information barriers are torn down, the ability to manipulate resources and performance data becomes far more restricted. This leads to a minor renaissance as the organization realizes just how much power and control had been wielded by mid-level managers who had exploited the chaos to their own benefit.
- Timely and accurate data alone will not put an end to dysfunctional behavior. The proper context must also be created, and mid-level managers have the perfect vantage point to make that happen. Once acceptable thresholds for performance have been established, information technology can apply business rules that automatically trigger alerts when these thresholds are exceeded. Rather than crisis management, the emphasis shifts to early warning analysis and preventative action, which can have a profound impact on the bottom line.
- Having a more integrated suite of information systems also removes another temptation for mid-level managers. In the past, these managers had significant, if not too much, control over what information would be shared with employees or executives. Sometimes that control is driven by a deep-seated fear of sharing sensitive business data with the “wrong” audience (whoever that may be). Taken to the extreme, employees can be intentionally kept in the dark, and eventually

everyone suffers, including clients and partners. Having access rights and business rules built into the IT infrastructure will at least ensure consistency of data protection.

- The relationship between resource managers and project/engagement managers also deserves attention. In the past, functional managers were frequently locked in mortal combat with project managers over the ultimate control of people resources. All too often, functional managers won these skirmishes because possession is nine tenths of the law, and giving up their best people to an endless stream of project requests seemed self-defeating. As a result, many initiatives were understaffed or lacking critical skills, which in turn triggered issues and risks that might otherwise have been avoided. The underlying cause of this problem could often be traced back to an antiquated reward structure for functional managers, whose bonuses were driven by aggressive (if not unrealistic) targets set by senior management. Out of self-defense, the functional manager began fending off special engagements, which ended up hurting client delivery and the enterprise itself.

In the future, however, these conflicts are largely overcome. By now, executives have completely overhauled the reward system to encourage cross-functional cooperation. Automated systems track resource utilization across billable client projects, as well as non-billable internal initiatives. This analysis directly feeds into corporate priorities for recruiting and training based on projected demand for skilled resources.

Accountability of Executive Decision-Makers

Despite the best of intentions, senior management often sets the tone for dysfunctional behavior. When PSOs get caught up in crisis management, small problems rarely show up on the executive radar screen because a backlog already exists of problems needing immediate attention. With no bandwidth available, executives often have little choice but to apply “quick fixes” before moving on to the next issue.

Unfortunately, quick fixes rarely solve problems. Instead, they simply go into remission and eventually resurface bigger than ever. Meanwhile, small problems have acquired sufficient mass to appear on the radar screen, which triggers a new round of quick fixes. At the end of a long day, executives rightfully marvel at their own productivity, but looks can be very deceiving.

Fast-forward to the future. For busy executives, the most significant change will be a shift from crisis management to re-establishing their role as strategic visionaries. Limited bandwidth and access to reliable data no longer serve as barriers for effective decision-making. The consistency and integrity of performance data will be in large part driven by automated processes built into online applications and user-friendly templates. Taken one step further, a consistent services lifecycle methodology will become the defining context for core business processes. This last point is critical, because it defines the end-to-end lifecycle of how employees, partners, suppliers, and customers work together from initial concept through final delivery and ongoing support.

Within this future vision, perhaps the greatest achievement comes in the form of *accountability*...not just for employees and mid-level managers, but for executive decision-makers.

- By now, senior management has united behind four main business objectives that drive all decision-making—*service, speed, growth, and cost*. Keeping the concepts simple and constantly communicating their importance proves to be essential for widespread buy-in. Rather than playing *enforcer*, executives find much greater success as *head cheerleader* and *guidance counselor*—roles that had been largely forgotten in the clutter of crisis management.
- To ensure alignment with business objectives, executives realize that a different kind of accountability is required of mid-level managers. As functional and engagement managers join forces to improve service delivery, the emphasis shifts from near-term management to the more strategic goals of program and portfolio management. Executives quickly grasp the significance. In the past, projects had been mostly delegated as a mid-level management responsibility, so the breakthrough did not occur until the concept of “project” was redefined to include: (1) all strategic initiatives, (2) business transformation activities, (3) operational improvements, and (4) traditional in-house or client development efforts.

- Once executives realized how much of the company’s annual budget could be tied directly to an enterprise portfolio of projects, a top priority was given to the integration of financial, project, and resource management. The tight integration of supporting systems provided deeper insights into resource and budget allocation, as well as the performance tracking of service delivery and project profitability. Almost overnight, traditional status reports were jettisoned in favor of executive reports that rolled up essential project, engagement, or case data into a context that supported real-time decision-making. As communication improved throughout the chain of command, executives found that most project setbacks or failures came as a result of problems that were beyond the control of project managers. To help remedy this situation, the most serious issues and risks were routinely prioritized and escalated to an Executive Governance Board for prompt attention. This accountability at the executive level removed a major source of tension and frustration within project teams that could now focus on matters well within their own control.
- The key to this almost transcendental experience was the ironclad assurance from executives that the messengers (as in mid-level managers) would not be shot for bearing bad news. The sooner problems are identified, the more quickly action can be taken to minimize damage. The only cause for disciplinary action is gross negligence or the intentional hiding of bad news. This aggressive stance by executives quickly broke down barriers that had seemed all but impenetrable in the not-too-distant past.
- As executives become more proactive, mid-level managers are encouraged to find new ways to reinforce their own role as Gatekeeper. The mentoring of project managers and sponsors, as well as the adoption of “lessons learned,” takes on higher priority because of the direct impact it has on continuous improvement. Incentive systems that once rewarded individual performance are quickly replaced with team-based incentives, which further improve collaboration across the enterprise.
- Based on internal successes, senior management also finds more creative ways to incent partners and suppliers. Cooperative behavior is financially rewarded, while breeches in trust or the intentional hiding of performance problems play a role in defining more strategic, long-term relationships. Collectively, these actions keep all parties focused on successful client delivery, rather than the narrow interpretation of contractual documents. Not surprisingly, the willingness to share sensitive data across corporate boundaries was closely tied to everyone’s confidence in systems security. Extreme candor requires a high degree of trust, but once this trust is established, the overall success rate of multi-vendor initiatives improves considerably.
- As a final discovery, the executives had always been concerned that too much budget was being diverted to infrastructure projects, and that the money was not being spent wisely. When the enterprise portfolio of projects finally stabilized, senior decision-makers began setting targets for the distribution of corporate funding and resources. Four strategic categories were created to reflect the total portfolio:
 - **Venture** — Seize new market share
 - **Protect** — Defend existing market share
 - **Improve** — Internal discretionary improvement
 - **Core** — Internal non-discretionary support (“keeping the lights on”)

Management then decided upon a minimum allocation of funding and resources that would go toward *venture* and *protect* strategies, and a maximum allocation for the two internal categories. All current and proposed “projects” were then routinely evaluated against the business alignment criteria of *service, speed, growth, and cost*. This set the tone for all future governance meetings, which bore little resemblance to the way business had been conducted in the past.

Commentary. In noting the irony of all that has happened, an executive makes the following observation: “We all take for granted the wisdom of managing a stock investment portfolio based on changing market conditions, yet it took us years of turmoil and some painful failures to realize that we should be doing the very same thing with our corporate portfolio of projects and resources.”

An Enterprise Model for Business Integration

Can this “future vision” for emerging PSOs be realistically achieved in today’s environment? Based on recent technology advances and a renewed focus on corporate responsibility to all stakeholders, the answer should be an emphatic “yes.” One way or another, most technical challenges can be overcome. Whether these small to mid-sized PSOs are willing to tackle the root causes of dysfunctional behavior that lead to poor decision-making is a more complicated issue. For the sake of argument, let’s assume that human nature prevails, and the last remaining obstacle is the information technology needed to ensure timely, accurate decision-making across the enterprise.

Earlier in this paper, four primary options had been identified when planning for a next-generation infrastructure: (1) enhancement of existing systems, (2) custom, in-house development of new systems, (3) integration of “best of breed” vendor products, and (4) selection of proven vendor products with top priority being given to seamless integration. The first two options were quickly dismissed as being impractical, if not naïve. Option 3 was a logical candidate, and Option 4 might be preferable, but the cost and complexity of products from suppliers that offer these highly integrated solutions may be prohibitive.

In reviewing these options, the next logical step is to visualize what a high level enterprise business model might look like for small to mid-sized PSOs. [Figure 1](#) depicts a framework for integrating key business functions.

Conceptual Model for PSO Business Integration

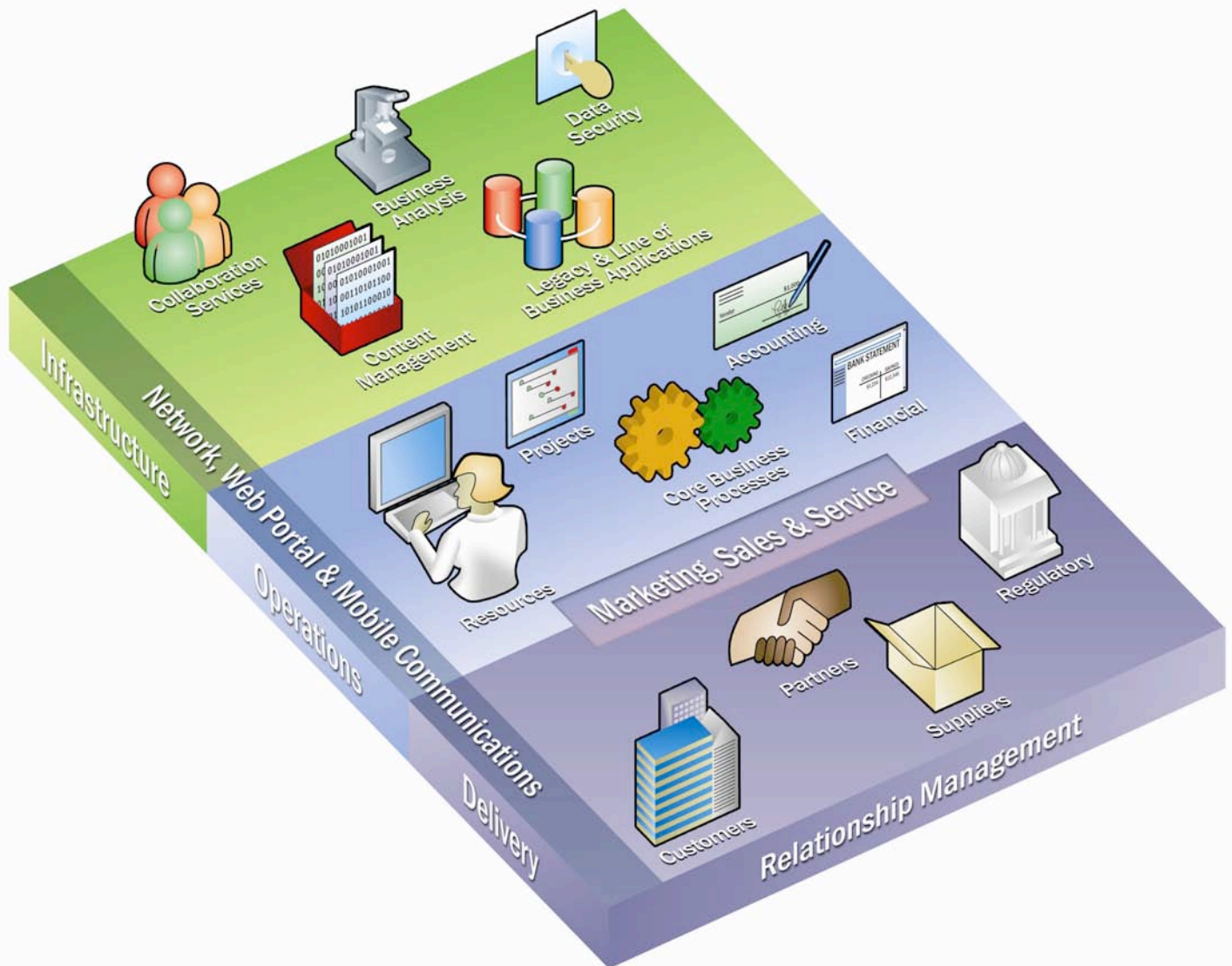


Figure 1. Conceptual Model for PSO Business Integration

This model offers a high level view of information and collaboration that spans the value chain within small to mid-sized PSOs.

This conceptual model emphasizes the business value of integration and major dependencies that exist in managing information, communications, and relationships—all of which are essential to the success of services-oriented organizations. A brief summary of the model's main components appears below:

Delivery

Relationship management extends beyond the customer (whether internal or external) to include partners and all types of suppliers. This growing reliance on partners and suppliers requires intense collaboration, and in many ways should be treated as a natural extension of corporate resources. Another facet worth considering is the organization's response to government regulatory mandates, as well as voluntary compliance with industry-based quality standards. These regulatory actions usually require detailed documentation, and the enforcement of minimum, standardized procedures. Rather than addressing these challenges in an ad hoc fashion, more and more organizations are adopting a systemic approach that can greatly reduce the amount of time, energy, and bureaucracy needed to ensure compliance.

Operations

In order to improve service delivery and profitability, many PSOs are taking a more synergistic approach to managing people, time, and money. One of the best ways to achieve this end is by automating the core business processes linked to marketing, sales, and service. An added twist to this model is the formal inclusion of "projects," which has been broadly redefined to include all strategic initiatives, business transformation activities, operational improvements, IT development efforts, client engagements, cases, etc. The emphasis should not focus on the pros or cons of project management or the terminology used here, but rather the realization that consistent delivery of products and services over time will always outperform ad hoc delivery.

Infrastructure

This business model emphasizes the integration of legacy systems with other line-of-business applications. However, the ability to manage that information within the context of service delivery and effective decision-making receives an equal priority. As a result, considerable attention is given to: (1) collaboration services, (2) content management, (3) business analysis, and (4) data security. In the past, people often shouldered the burden of providing these services because of the barriers imposed by disparate systems. Fortunately, new technology advances now make it both practical and affordable to take a more systemic approach to these critical functions.

Integrated Communications

Information technology also plays a key role in ubiquitous communication...the ability to share information and knowledge with anyone, anywhere, at any time. Beyond local and wide area networks, organizations can now link their employees, customers, partners, and suppliers through enterprise Web portals, wireless communication, and other multimedia channels. Data security features help to protect sensitive, proprietary information, while broadcasting public information around the world with relative ease.

The Final Frontier: Innovative Integration

After all the research and analysis has been completed, the time has come to decide upon a master infrastructure plan that supports current needs, while anticipating future growth. Perhaps the biggest mistake made by emerging PSOs is placing too much emphasis on "best of breed" functionality without considering the impact on overall integration. To minimize this risk, one proven tactic is to consider benchmarking. Find a total solution strategy that offers a decent likelihood of success, and then measure other options against that yardstick. As it turns out, identifying a viable benchmarking candidate for emerging PSOs (again, roughly 50 to 1,000 employees) is not all that difficult. Simply look at the most widely used productivity and desktop tools currently supporting your organization. If your company is typical of PSOs found all over the world, the answer will probably be Microsoft.

What you may not be familiar with is the total suite of Microsoft products when viewed as a potential enterprise-wide architecture for emerging PSOs. In recent years, the Microsoft family of products and technologies has evolved so rapidly that few businesses fully grasp Microsoft's vision for "innovative

integration.” What follows is a “big picture” view of what a seamlessly integrated infrastructure might look like leveraging Microsoft technology.

Another Side to the Story

First and foremost, the notion of a Microsoft-enabled infrastructure should focus on the integration of people, process and information, which serves as the life’s blood of any PSO. Perhaps the best way to understand Microsoft’s overall strategy is to look at it from several different perspectives:

- The first insight comes from an eye-opening statistic. Microsoft’s research and development budget in 2004 will exceed \$6.8 billion. Much of that investment goes into the evolution of a common code set that can be shared across Microsoft platforms, servers, and applications, as well as enabling standards-based connectivity with other third-party products.
- The second revelation comes from an awareness of Microsoft’s roots. Peel away the high technology and new product offerings, and you will find Microsoft® Office System at the core—a suite of productivity tools designed to help people be more effective whether at home, work, or play. This bodes well for service-intensive organizations that place a high value on personal initiative and collaboration as a competitive advantage.
- The third point worth noting is Microsoft’s leadership role in supporting industry standards. Extensible Markup Language (XML)—an open and widely accepted standard within the World Wide Web Consortium—offers a simple way to define the data structure residing in documents. Not only has XML been extensively applied to Microsoft Office 2003 and other Web-enabling technologies like Microsoft .NET Framework, but any company can now use XML to edit, archive, and share structured data across disparate systems and Web platforms.
- A final eye-opener is the depth and breadth of Microsoft’s global partner network. Today, more than 5,000 certified, independent partners specialize in extending the functionality of core Microsoft products.

Since its founding in 1975, Microsoft has never lost sight of its small to mid-sized customers. Careful attention has been given to purchase criteria like cost, ease of use, user training, technical support, and scalability. Specialty offerings have also been developed such as Microsoft Small Business Server and Small Business Manager, which delivers a fully integrated suite of financial management, sales, purchasing, inventory, payroll, and reporting capabilities. Where it all comes together, however, is at the enterprise level. **Figure 2** provides a snapshot of Microsoft technologies that collectively support a highly integrated infrastructure for small to mid-sized PSOs.

Overview of a Microsoft-Enabled Infrastructure

At first glance, the diagram in **Figure 2** may seem somewhat imposing, but considering the complexity of most well-engineered business infrastructures, this model is actually quite streamlined. Of course, there are hundreds of products and services available within the Microsoft family, but the objective here is to visualize an overall business integration model that supports data sharing, collaboration, and effective decision-making within PSOs. The remainder of this section will be used to summarize key components within this model.

Microsoft-Enabled Business Integration Model for PSOs

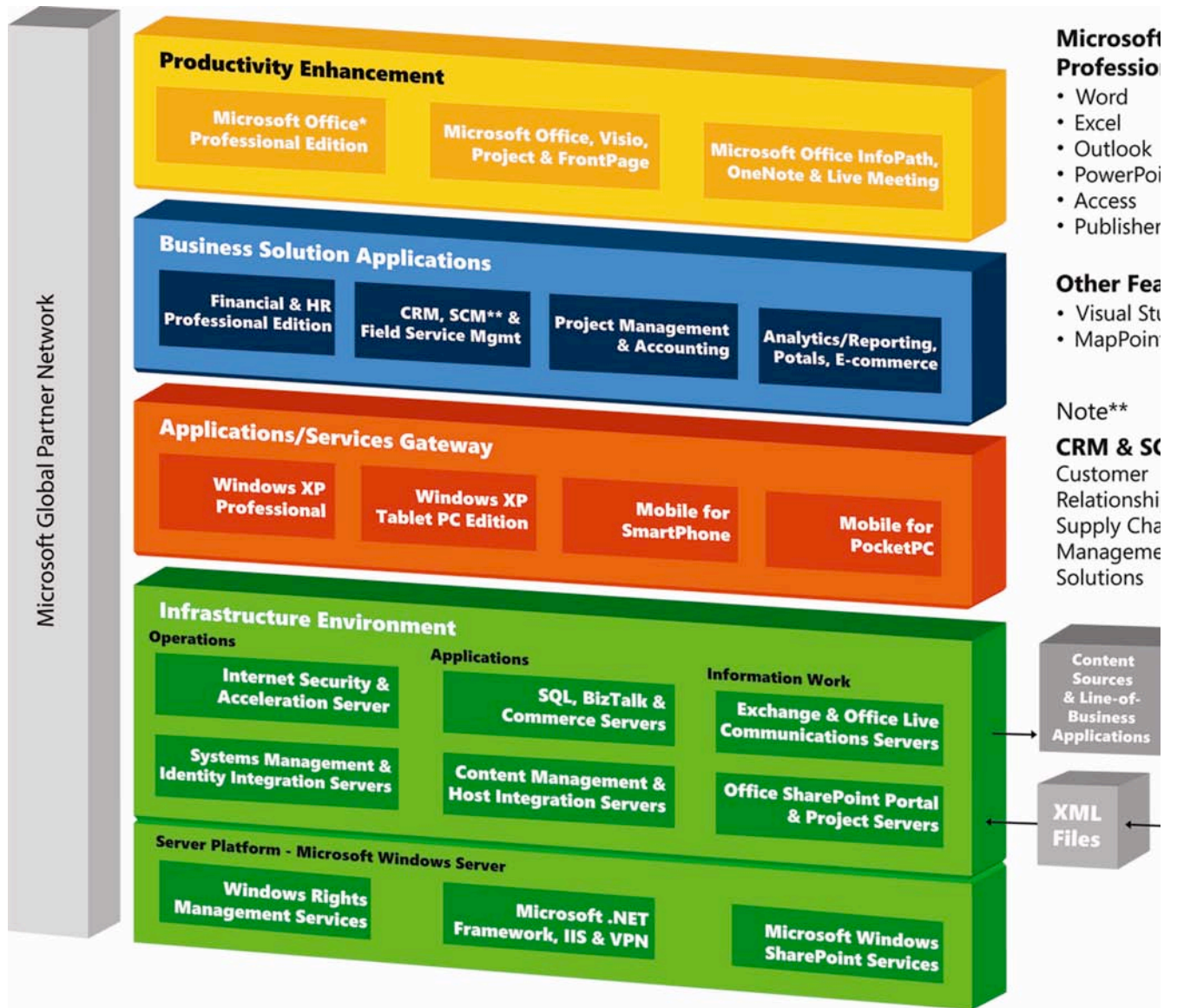


Figure 2. High Level Microsoft Solutions Stack for PSO Business Integration

This represents a logical view of Microsoft applications and services that can support the integration of business data and collaboration at the enterprise level for small to mid-sized PSOs.

Productivity Enhancement

At the heart of this solution is the **Microsoft Office System**, which offers a familiar suite of easy-to-use applications for document authoring, analysis, information gathering, presentation, and communication. Oddly enough, many organizations take the Microsoft Office System for granted, and delegate the responsibility of user training to individual employees. Managed as a true corporate asset, however, the productivity gains can be stunning when Microsoft Office is leveraged with other technologies such as Microsoft SharePoint® Portal Server, Microsoft Windows® SharePoint Services, Microsoft Exchange Server, and Microsoft InfoPath™. For additional highlights, see below:

- The ability to easily transfer text, data, and graphics between Microsoft Office Word, Excel, and PowerPoint® has become second-nature for many people, but this only scratches the surface. Microsoft Office Visio® makes it easy to design workflows or business processes and then export these “smart” diagrams into other mainstream tools. Microsoft Office InfoPath helps to collect, personalize, and reuse information by accessing business systems and processes that may be otherwise trapped in isolated databases. You can also digitally keep track of personal notes from meetings, Web sites, and other research methods using Microsoft Office OneNote®, and then easily share that information with others.
- Microsoft Office Outlook® long ago built its reputation on the ease of sharing e-mail messages and attachments, but it also provides a single, standardized tool for the tracking and sharing of calendar events, personal tasks, and contact information, as well as the filtering of junk mail, which has become a growing concern for many companies.
- For businesses seeking to better leverage Web technologies, Microsoft Office FrontPage® has the design, authoring, and publishing tools needed to create dynamic Web sites. Users can post to these Web sites using nothing more than their standard Internet browser. Microsoft Office Live Meeting saves both time and money by enabling user-friendly, multimedia Web broadcasts without sacrificing face-to-face contact. For project managers who oversee far-flung project teams and customers, Microsoft Office Project has evolved into a true, enterprise suite of Web-enabled tools for managing complex business initiatives or an entire project portfolio. Taking Web technology one step further, Microsoft SharePoint Portal Server can create a unified portal solution with all the tools needed to access files, Web sites, databases, and line-of-business applications, requiring only a single user sign-on.
- **Good News for Mac Users.** Many service organizations have learned to co-exist with two platforms—Microsoft Windows for business applications and Macintosh for graphics and other creative services. Microsoft Office 2004 for Mac offers seamless compatibility so that Word, Excel, and PowerPoint files are exchangeable on both Mac and Windows. The Entourage® personal information manager (PIM) application is the Mac counterpart to Outlook and allows Mac users to connect to the same Exchange messaging platform as Outlook users. If Windows applications are only accessed occasionally, “Virtual PC for Mac” can be used to run Windows OS directly on Mac computers.
- **Cost/Benefit Analysis.** Navigant Consulting recently published a study that revealed “The median payback on investments in Microsoft Office System solutions is eight months. For 67 percent of IT investments studied, companies plan to recover their investment in the solution in less than one year.”

Business Solution Applications

Along with enabling technologies, Microsoft offers a variety of integrated business applications aimed directly at small to mid-sized organizations. Within Microsoft Business Solutions, a sampling of these solutions includes:

- Financial Management—covering general ledger, payables, receivables, inventory, sales, purchasing, bank reconciliation, fixed assets, and more.
- Human Resource Management—from employee recruiting through retirement services.

- Customer Relationship Management—from reduced sales cycles to improved customer loyalty.
- Supply Chain Management—from the pursuit of new market opportunities to improved customer loyalty and profitability via more efficient partner collaboration.
- Other offerings include Field Services Management, Project Management and Accounting (PMA), Analytics/Reporting, Business Web Portals, and E-commerce, as well as specific industry solutions for Manufacturing, Retail, Online Business Services, etc.

Microsoft Business Solutions are built on an open architecture and leverage Microsoft SQL Server™-based technology. These offerings also integrate with the Microsoft Office System to create valuable productivity benefits for executives and knowledge workers alike. Some examples of this are:

- Extensive integration with Microsoft Excel and Microsoft Word to offer single click transfer of key data into spreadsheets, letters, reports, etc. and data in these applications can also be imported into financial management tools.
- Smart tags enable users to drill down in accounting data from familiar Microsoft Office Applications such as Outlook, Word, and Excel.
- Integration with the Microsoft Office Enterprise Project Management Solution offers significant benefits for integrated project management and accounting (PMA) where the automatic flow of data between these systems can reduce manual data entry errors, increase project visibility for executive oversight and drive a number of improvements to financial benchmarks.
- Field service management integration with Microsoft MapPoint® helps ensure technicians arrive at the right location at the right time.

Microsoft Business Solutions are delivered by a global network of more than 5,000 certified Microsoft partners. These partners can provide local, personalized support that spans the entire services lifecycle from initial consulting through implementation, training, and ongoing support. When planning for future growth and flexibility, this kind of availability should be factored into your purchase criteria.

Applications/Services Gateway

As workforce mobility becomes a basic fact of life for service organizations, Microsoft has introduced a host of wireless communications packages, including: (1) Microsoft Windows XP TabletPC Edition, (2) Microsoft Mobile for SmartPhone, and (3) Microsoft Mobile for PocketPC. Since these gateway products are fully synchronized with Windows XP Professional, you can avoid compatibility problems that often exist in multi-vendor environments. Other benefits range from improved reliability and security to mainstream advances in multimedia and mobility, and lower IT support costs.

- For PSOs that are evaluating Microsoft Windows versus “free” software such as Linux, the most important factor to consider is total cost of ownership. This includes the development, integration, and management of applications, level of required IT support staff, and user training. Independent studies have shown that low initial software acquisition cost is just one factor—and often not the most important—when looking at long-term investment options.
- **Cost/Benefit Analysis.** Based on market research studies conducted in early 2002, KPMG Consulting published the following results: *“Customers (using Windows XP) are able to achieve an average return on investment (ROI) of 203% with an average 13-month payback period. The net present value (NPV) was \$375 per-PC.”*

Infrastructure Environment

Today, server technology forms the backbone of most IT platforms. At the same time, uncontrolled growth of new servers can place a heavy burden on companies in terms of total cost, IT support, and the ease of sharing critical information. For smaller PSOs the ideal situation is to consolidate servers as part of a master IT plan, and Microsoft has targeted that business need. Many organizations have already invested in Microsoft SQL Servers and Exchange Servers that support the most popular Microsoft Office

applications. What may be less well known is the latest generation of Microsoft servers that can take information sharing and Web-based services to a new level.

- To safeguard digital information from unauthorized use, Microsoft Windows Rights Management Services enables protection of sensitive data, such as Web content, documents, and e-mail, through the enforcement of rules that remain with the content—no matter where it goes. To round out the Web-enabling environment, Microsoft Windows SharePoint Services works seamlessly with SharePoint Portal Server (mentioned earlier) to ensure flexible file storage and a single point of access for quickly locating documents, projects, and best practices across the company.
- By streamlining the Web publishing process, Microsoft Content Management Server helps to quickly build, deploy, and maintain content-rich Web sites. Meanwhile, Microsoft Commerce Server supports the rapid deployment of online business portals using customizable tools to manage customer profiles, personalization rules, pricing, and advanced analytics. With Web security becoming ever more important, Microsoft Internet Security and Acceleration (ISA) Server provides an extensible, multilayered enterprise firewall that helps to ensure fast, manageable, and secure Internet connectivity.
- More businesses today rely on Microsoft Exchange Server for e-mail-based collaboration than any other product. One of the most valuable features for PSOs is Outlook Web Access, which provides fast, secure access to Outlook e-mail over the Internet without having to worry about firewalls when working from client or other remote sites. Better yet, this Web access mirrors the look and feel of standard Outlook 2003, including spell check, task listing, and content blocking. This can be a real productivity boost for service providers, who spend much of their time in the field. As mentioned earlier, Microsoft Exchange Server also supports the Entourage personal information manager (PIM) in Microsoft Office 2004 for Mac, so Mac users can seamlessly work together with Windows users.
- As another example of Microsoft's server-based strategy, Microsoft BizTalk[®] Server was developed to help integrate applications, systems, and trading partners by orchestrating data through a series of business processes—without modifying any existing systems. Business rules can be easily defined in Microsoft Office Visio and then uploaded to BizTalk, while InfoPath allows you to create, personalize, and share online forms across business processes and organizations.
- Underlying all of Microsoft's server technology is the Windows Server[™] platform. Microsoft Windows Server 2003 has been designed for system administrators who want to quickly deploy and manage services. Just a sampling of features includes easier storage and data backup, more highly automated software update services and server configuration wizards, and routines that safeguard networks from malicious or poorly designed code. Within this platform there are also a number of development tools such as .NET Framework that give developers a single approach to building desktop and Web-based applications.
- Depending on your business environment, Windows Server 2003 comes in various configurations: Small Business, Standard, Professional, Web, and Datacenter Editions. Windows Small Business Server 2003 may be the right answer for smaller PSOs that want “big business” functionality, but without the added cost and complexity. Designed as a total business server solution, features include messaging and collaboration, security-enhanced Internet access, protected data storage, reliable printing and faxing, and the ability to run line-of-business applications.

Microsoft's Global Partner Network

The global network of resources supported by Microsoft goes far beyond typical partner/vendor relationships. This network includes certified partners, technical education centers, Microsoft product resellers, total solutions providers, and independent software vendors using Microsoft technologies. When investing in infrastructure products and services, companies should pay close attention to the reliability and stability of any strategic vendor and its partner network. Horror stories abound about new vendors that hit the market by storm with cutting-edge technology and great price points, only to see those vendors or their product lines disappear overnight, while customers are left to sort out the aftermath. With Microsoft, that kind of concern is not likely to keep executives and IT managers awake late at night.

Ultimately, PSOs Must Choose for Themselves

This white paper was designed to explore some of the subtle and not-so-subtle challenges facing business decision-makers in small to mid-sized service organizations. In pursuing this objective, we looked at three key dimensions: (1) the underlying causes of dysfunctional behavior that promote poor decision-making, (2) a future vision of emerging PSOs where barriers to effective decision-making have been largely overcome, and (3) the benchmarking of an integrated infrastructure that facilitates the communication and collaboration needed to make sound business decisions.

This brings us back to the ultimate question: Can emerging PSOs completely bypass the trauma of dysfunctional behavior and poor decision-making? Probably not. When standing in the eye of a hurricane, few people can calmly assess the whirlwind of problems and opportunities that surround their every move. Sooner or later, however, survival may depend on how well everyone works together to sort out the chaos, while keeping an eye on the future.

As for Microsoft's viability in supporting an integrated infrastructure, the company should be given credit for tackling tough issues head-on. This includes server scalability, data security, and research on total cost of ownership. As these barriers continue to fall, attention will increasingly shift to future potential rather than past limitations. Is Microsoft the right answer for your own organization? That's strictly your call, but a growing number of small to mid-sized PSOs have chosen to become a "Microsoft shop" for the business reasons outlined below. When standing in the eye of a hurricane, it never hurts to arm yourself with all possible options. Even after the dust has settled, you never know when or where the next storm will strike, so being *prepared* to make the right decisions is always your safest bet.

Benefits of a Microsoft-Enabled Infrastructure

1. **Lower Total Cost of Ownership.** Total cost of ownership goes beyond IT-related expenses to include the reuse and repurposing of business content where it impacts productivity and profitability at the enterprise level. Other factors include the long-term cost of hardware and software upgrades, size and competency of IT staff, training required by end users, etc.
2. **Timely, Accurate Decision-Making.** Sound business decisions rely heavily on having the right information, at the right time and within the right context. Lack of confidence in the integrity and timeliness of that data can seriously undermine its value to executive decision makers. Ensuring the perceived value of business information can be as important as the data itself when the outcome has a direct bearing on the company's future.
3. **Optimization of Resources.** Service organizations have always been driven by the effectiveness of people working together, whether it involves employees, management, customers, partners, or suppliers. An IT infrastructure should be designed to optimize the productivity of human resources and other assets that impact revenue, profitability, and cost.
4. **Seamless Integration of Business Data.** "Best of breed" systems can be counted on to perform required functions, but a seamlessly integrated infrastructure ensures that people, information, and processes work together to achieve business goals. Islands of information—no matter how well designed—do not make for better decision-making.
5. **Integration of Core Business Processes.** Once data integration has been addressed, the challenge still remains of putting it in the proper context. Systems that can collectively manage, share, and analyze data based on consistent business processes will help management sort through the clutter, and access only what is needed to make sound business decisions.
6. **Improved Enterprise-Wide Collaboration.** Today, collaboration goes far beyond phone calls and e-mail to include Web broadcasts, PDAs, smart phones, and instant messaging. Linking the latest collaborative technologies at the infrastructure level can dramatically boost the productivity of a highly mobile workforce.

7. **Customer, Partner, and Vendor Relationships.** Over the past several years, Customer Relationship Management (CRM) has become a hot topic. Unfortunately, the anticipated benefits and ROI have often been disappointing. To be successful, CRM requires a more holistic approach, including better collaboration and clearly defined accountability. The same holds true for strategies linked to partners and vendors.
8. **Ability to Leverage Existing IT Investment.** Managing a company's IT infrastructure can be complicated and expensive, even for smaller service organizations. Fully leveraging your current investment in Microsoft technologies can pay long-term dividends, especially considering the integration and cost of future upgrades.
9. **Microsoft's Global Partner Network.** Much of Microsoft's success can be attributed to its unparalleled network of certified partners that provide everything from add-on applications, consulting, and training to system integration services. These independent companies constantly compete on a global scale, and the eventual winners are Microsoft customers, who benefit from this dynamic, innovation-driven environment.
10. **Microsoft's Vision of the Future.** Microsoft invests billions of dollars every year in product research and technology development. For smaller service organizations, who have limited IT staff and budget, this can be an effective way to mitigate some of the risk of maintaining an infrastructure, including the introduction of new technologies.

About the Author



Allen Chapel, PMP, has more than 25 years experience in project management consulting, systems integration, and marketing strategy. Since 1998, he has served as a Principal Consultant at Pcubed, one of the world's largest companies dedicated to project, program, and portfolio management solutions. Having managed several multi-year, \$30 million projects for Fortune 500 companies, Allen now advises clients on topics ranging from Enterprise Portfolio Management and PMOs to formal PM Maturity Assessments. In supporting Pcubed's role as an Enterprise Premier Microsoft Project Solutions Partner, Allen has authored and presented a variety of Web broadcasts for Microsoft and the Project Management Institute (PMI),

including: *The Business Value of Enterprise Project Management*; *Creating a Competitive Advantage with Project Management and Accounting*; *Learning to Thrive in a Risk-Averse Culture*; and *Projectizing Service Organizations*. He also authored another widely distributed Microsoft white paper entitled: *Creating a Competitive Advantage with Project Management and Accounting: Four Breakthroughs to Improve Project Success and Service Agility*.

For further information, Allen can be contacted at: allen.chapel@pcubed.com.

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