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A Delphi Group White Paper

In Process

The Changing Role of Business Process Management in Today's Economy

Business Process Management: Table of Contents

The purpose of PART 1 of this white paper is to establish the context and the imperative for the evolution of Business Process Management (BPM) and to account for its sudden resurgence as a tool for businesses striving to prosper in the uncertainty and economic pressure of the day. The ideas and concepts covered, such as process-based organizations, Business Operating Systems, Web services, and Business Service Providers, provide a basis for understanding the rich technology and organizational context for BPM.

Until very recently companies had become white-collar gluttons, using an ever increasing labor pool as a spoiled child might use a trust account; for meaningless and often trivial applications.

The trust fund has run dry. The current economic landscape will no longer support the sort of expansion in labor that epitomized the 1990s. Suddenly we find ourselves at the precipice of an economic collapse as unemployment and underemployment subverts our ability to prosper from the much touted productivity increases of the past two decades.

In this new era, individuals and enterprise no longer have the luxury of wasting any type of capital – least of all human capital. We need to carefully define value and apply people to those tasks that are most worthy of them – apply technology to what remains.

But this does not justify or support the dumbing down of organizations through rampant downsizing. Business Processes Management (BPM) should not be a prescription for the zealous pursuit of job elimination. Nor should it be regarded as a manifesto for short-sightedness. Instead it should be the basis for vision and brave leadership into the new millennium.

What's needed to serve this purpose is an awareness and an acceptance of management's role in using BPM to apply human intellect in ways that increase opportunity and innovation. We cannot manage costs alone, without sending the global economy into a death spiral.

We need brave managers who are willing to take advantage of BPM, not as a means of exploiting workers and pacifying stockholders, but rather as vehicles for providing long-term opportunities and prosperity for both. Managers who are not simply responsive but strategic. Managers who have the confidence in their ability to create new paradigms for work and the value of the worker.

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Moving the Work

The organizing principle of today's organizations is that the work, and the tools needed to do that work, are moved to the workers – wherever they are.

Simply put, in today's organization everything revolves around the people.

This is not a revolutionary concept when applied on a small scale, but when considered in the context of today's Internet-based economy and society it directly challenges what is perhaps the most salient feature of modern capitalism and the cornerstone of industrialism: the growth of the centralized enterprise, in which workers came to the work.

And this is the essential mandate and challenge driving BPM.

In the past, organizations were built around processes that remained fairly intact over long periods of time. Even when the processes did change it was within the purview of the organization to coordinate internal resources to realign with the change. This is simply not the case any longer.

Processes are not contained within organizational borders. The rapid reamalgamation of value chains and the shift in organizational governance from large hierarchies to flat (what we will later call perpetual) organizations is shifting control to far more decentralized authorities.

Although this is easily understood by anyone working in today's volatile climate, the history and culture of centralized processes is long, well-established, and difficult to break away from.

Since the first water-driven looms of the late eighteenth century, workers have trooped off to foundries, mills, mines and offices. The idea of the factory – often an empire unto itself – looms large in the collective consciousness in the history of the United States and the nations of Western (and later Eastern) Europe.

A number of factors made this possible. The development of interchangeable parts by Eli Whitney and

other inventors in the late 1700s and early 1800s meant that goods both large and small could be produced with benchmark levels of consistency and quality. James Watt's steam engine, first put to use in the 1760s pumping water out of mine shafts, was joined by the electric motor and the internal combustion engine.

In a very real sense, these developments paved the way for Henry Ford who understood the movement of work and used it to its fullest. He did not create new technology, or even radically change existing technologies. Ford's innovation was not mass production, nor the principle of interchangeable parts. Ford did not even create the assembly line. Ransom Eli Olds and the Cadillac Motor Co. were already using complex interchangeable parts and assembly lines in their manufacturing processes.

Ford's innovation was so simple as to be overlooked even in most history books. His assembly lines moved – work was transported to the worker, not the other way around.

It is this same principle, the ability to move work not just information, that is so suddenly changing the landscape of the modern organization. The advent of portals, Web services, and syndicated applications are all an evolution in the way that work is moved. And at the heart of this trend is the increasing imperative to somehow coordinate this work in complex and often chaotic markets, value chains, and economic environments.

We will further explore the issue of complexity and other forces shaping the business environment later in the white paper. But first it is helpful to describe in simple terms the fundamental framework for BPM in today's volatile economic climate – what we will call the trend towards the Singularity.

Toward the Singularity

In the midst of the market and economic pressures being placed on organizations, the very nature of time seems to be changing.

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From the volatility of equity markets to the shrinking of product life cycles, and in nearly every aspect of our lives the metronome ticks ever faster. At the heart of it lies one of its most visible catalysts, the Internet, which has become both a boon and a bane to global enterprises. On the one hand, it has provided the first significant working model for the extended enterprise, proving that empires are built through limitless connectivity and collaboration, not the Byzantine organization charts that defined the enterprise of the last century. On the other hand, it has shortened time and improved efficiencies to the point that competitive advantage dissipates at the speed of light. As we approach markets of zero latency organizations seem to break down as their internal processes shudder under intense pressure and velocity – integrity is compromised, risk increases, profitability erodes.

The reason is clear. Unfortunately, most enterprises have simply not been able to speed up their internal business processes to respond in time to the growing complexity presented by external links to customers and business partners. Without the ability to dramatically improve reaction times and reliability within the process, doing business at Internet speed makes little business sense. In order to improve business opportunities, business processes must become e-processes.

We can sum up the problem and the opportunity in a simple framework. As the volume of opportunities increases, the duration of each opportunity decreases.

Duration of Each Opportunity (y-axis) — Time — 0 — Volume of Opportunities (x-axis)
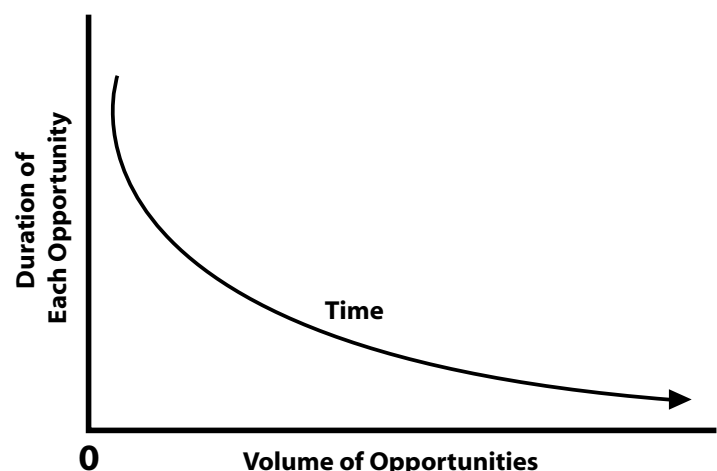
Web Services – Cornerstone of BPM

Often touted as the next frontier in BPM, Web services represent a new model for the syndication of work objects. Simply put, Web services provide a library and a distribution mechanism for individual work objects. A work object could be a simple process, such as the approval of a purchase order or the filing of a time sheet. Every business has a standard set of services, which reside on its internal information systems. At the same time these processes are virtually identical to those found across many different companies. Rather than build processes from scratch at each individual company, consider a model where companies broker these processes through service providers or specialized syndicates of business objects built for specific vertical industries. Although very new in practice, the concept of shared business objects has been around for nearly two decades. What is different today is the existence of common methods for describing, delivering and managing business objects (respectively XML, HTTP, and BPM). BPM is one of the cornerstones of Web services, providing the backbone for mapping and coordinating vast libraries of business objects, and connecting them to the processes they are best suited for.

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Taking advantage of these ever-smaller windows of opportunity requires not just speed and agility but increased integrity. Systems and processes have to be more reliable than ever.

Unfortunately, most enterprises have simply not been able to speed up their internal business processes to respond in time to the growing complexity presented by external links to customers and business partners.

The connectivity of the Internet and the myriad internal networks found throughout most organizations have put the resources and the information needed to accomplish virtually any task no further than a mouse click away. But the processes management tools needed to accomplish these same tasks are often obtuse and inaccessible to the vast majority of knowledge workers.

At the same time most business leaders know that their enterprise's external relationships are only as good as their business processes. Those processes are the means for creating and delivering products and services to customers. They also understand the inherent benefits of transforming business processes into e-processes, managing knowledge, and building enterprise models for complex processes. What they often fail to realize is that the solutions to each of these problems have to be just as distributed and diffused as the knowledge workers who own them.

Evolution of the Process-Based Organization

Understanding the sudden momentum towards BPM requires an understanding of the significant impediments that have stood in its way. Clearly, BPM is not a new discussion. The idea of improving processes has been

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a central theme during the entirety of the industrial age. What makes the discussion so much more relevant today is not simply the changing organizational landscape, the economic context, or even the science of management. It is rather a fundamental shift in the availability of integrated tools by which to enable many of the BPM concepts that have been heretofore nothing but pages in a textbook.

As technology has evolved and made possible new lines of communication within organizations, the standard organizational governance models have changed dramatically. Arguably, the role of technology in flattening and democratizing organizations is the single most profound factor in organizational change over the past 50 years.

This much is clear: the structure of an organization should be simply a tool for promoting communication – both within and without the organization. Hierarchy for hierarchy's sake has no place.

Hierarchies are the best way to segregate people within functions and ultimately create distrust and isolation. If you lock the process up within a confined ecosystem it will never keep pace with the shifting market climates it inhabits.

In fact, if we consider the value of a hierarchy it can be summarized in one word, communication. Hierarchies are vehicles of communication. This is especially true in the absence of adequate communication technology. But communication is not collaboration and collaboration is necessary in any BPM endeavor.

Unfortunately, the vertical organization, a fixture of the Industrial Revolution and the hallmark of many of the world's largest businesses, is still the most prevalent type of management structure among medium- and large-scale organizations.

In these organizations long response times are required to send information up-line and back down-line in order to make even basic decisions. Management guru Peter Drucker refers to these many layers of management in a vertical organization as, "boosters, amplifying the very faint signals that come up and down through the organization."

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From a BPM vantage point the more your organization changes, the more volatile it is, the more often you have to reorganize, the less likely hierarchy is to support rapid BPM.

Although it may be difficult to calculate the cost of constant reorganization, in terms of downtime and lost opportunity, it may well be one of the greatest productivity barriers. If for no other reason, hierarchies don't work because they simply cost more than they are worth, especially in times of frequent change such as we are experiencing today.

As hierarchies are dismantled, most companies move to a horizontal structure, epitomized by networks, matrix management, and teams. The horizontal organization has been lauded by many as the organizational structure of the future. But it has its own set of problems. The horizontal organization runs the very high risk of becoming a Minoan Palace, a structure that in Greek mythology was laid out like a maze and housed the Minotaur. A person who went into the Minoan Palace would never find his way out, their ultimate fate to be eaten by the Minotaur whose labyrinth only he knew. Could the ancient Greeks have been telling us something about the frustration of workers in a horizontal organization?

The problem with the horizontal structure has to do with the difficulty in identifying who is responsible and

accountable – in a word roles. After all, how often do you find yourself referring to an organization chart instead of relying on your tacit knowledge of the skills and capabilities needed to perform a task?

The concept of roles in this context is central to the success of a BPM solution. But it has not been easily dealt with historically. Once the role and the person disengage, most BPM solutions disintegrate, leaving the team approach in a state of chaos.

The team approach emphasized by the horizontal structure can work very well, but only if teams remain stable. They degenerate into chaos if there is a high turnover of team members. People move into new jobs within an organization, they transfer to other locations, or they leave the organization. The "free agency" of workers is inimical to forming stable and long-lasting teams. Thus, maintaining any sort of "institutional memory" is difficult, if not impossible. And this is precisely where most organizations find themselves today.

So which is the right organizational model? Is it vertical or horizontal?

Processes do not much care for the arbitrary boundaries of a compartmentalized enterprise. Instead, they must traverse an enterprise's infrastructure both vertically and horizontally. In addition, as enterprises embark on efforts that eliminate an over-specialized workforce, a new breed of generalist is evolving – one who is no longer constrained by hard and fast departmental boundaries and also has a much higher degree of process intimacy than the specialized worker ever would or could have. These generalists work together in extended coalitions of workers that cut across an enterprise's structure, geography, and politics.

It would seem to be a no-win situation. Both the horizontal and vertical organizational models have grave flaws.

The answer is plain, but only if we disregard the conventional context that formed both the horizontal and vertical organizations governance archetypes. These came into

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being at a time when the technologies for BPM were static systems analysis techniques. In today's context BPM is a real time exercise in coordination of roles and resources. In this context the form of organizational governance can change radically from one moment to the next. It shouldn't be based on a piece of paper stuck on the wall and called an organization chart.

Rather, it should be based on the competitive forces, the customers, the suppliers, the roles, the talent and the skill base within the existing organization. Creating flexibility requires creating a *process-based enterprise*. It is a change from the spatial structure of traditional organizations to the time-based essence of this new model. *Process-based enterprises create value in their enterprise by establishing an entirely new asset base, that of a process memory which allows instantaneous adaptability.*

These are organizations built around processes and information, not functions and management layers. The rules for structuring these organizations should be based on information about how people in the organization work together. And, depending on past experience and results, those rules can be changed, live, in real time. BPM in a processes-based organization does not tell workers how to do their work, only *what needs to be done.* This is an important contrast to the approach that was proposed by Frederick Taylor who emphasized telling a worker "how" to do his job, not on "what" to do.

Facing the Unknown: Enabling the Process-Based Enterprise

The limitation and the challenge in creating process-based enterprises has always been the lack of an effective means by which to push the process definition out to the extremities of the organization, where the work gets done – the critical touch points. Of employees, customers, and partners. The debate has always pitted the benefit of this sort of empowerment with the need for high integrity enterprise rules. In other words, if you let everyone define his or her own processes then you create a process dilemma where personalization impedes the flow of work.

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But what if we could both establish set rules for processes and still allow the touch points to define their own process flows? Rather than standing in the way of individual notions of personal productivity, process-based organizations could facilitate the establishment of business rules and then automatically enable their execution in a highly personalized context, but always consistent with enterprise procedures or objectives; simply put, integrity with flexibility. Sound complex? Not really. This is the basic formula for all living organisms. The building blocks of DNA are four amino acids with specific rules governing how they bind together. Yet their combinations result in millions of species of life.

The goal is to bring integrity to the process without stifling the creativity of an organization to respond to its environment (i.e. evolution).

In practical terms the idea is to integrate the existing workflow and business processes using a library of standard objects, or rules, that help produce information flow that can be mapped directly to the desktop. Rules are easy to change, and when used to create process templates they can result in a high level of process automation, which means new, more meaningful ways to capture, manage, and use key information.

What becomes clear as you examine your processes and workflows is that becoming exceptional at your business means becoming extraordinarily efficient at handling exceptions. In each instance – whether it is dealing with people, information or the steps of a workflow, is that exceptions are the norm. Very few transactions are routine or unexceptional. It is probably true that out of four transactions, one is routine and three are ad hoc. While

this may seem problematic on a logistical level, on a business level it means three-quarters of your business represents significant opportunities to enhance or improve your business. In fact you could easily claim, as shown in the illustration below, that most of your business processes are exception driven and very few are static.
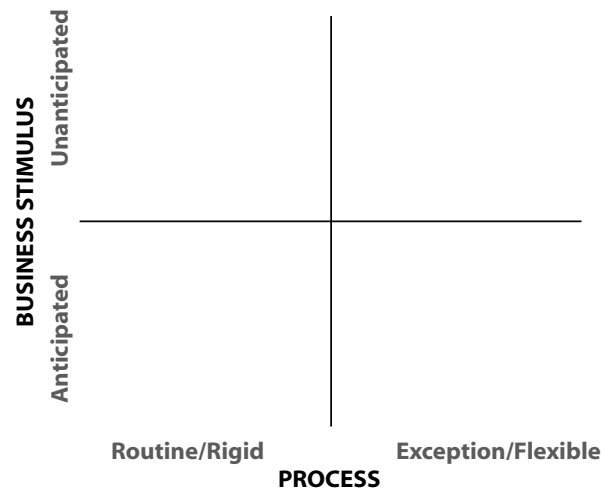
Addressing the three quadrants outside of standard, rigid transaction-based systems that respond to antici-pate business stimuli using routing processes requires something far more flexible and dynamic than the business process solutions available to date.

Web Services: Who Really Owns the Process?

There is incredible flux in business computing today. As the tenets of the New Economy crumble under time-proven business axioms, companies are scram-bling to figure out how to do business on and with the Web. For example, the market trend towards Business Process Outsourcing, Business Service Providers and Web services is being driven by a senior management edict to focus on core competency. Simultaneously, markets are lashed by the disintegration of value chains, whose myriad participants are trying to reinvent themselves as core competency providers.

Few would argue that a focus on core competency is misguided; nonetheless we still struggle to figure out how to string together and constantly reform the myriad

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interchangeable pieces of a value chain. We are undergoing a basic shift in the way we view the organization and the value chain.

Perhaps the truest words of wisdom here come from a source of great authority on the subject, Peter Drucker. Strategy, according to Drucker, not ownership, will define the organization of tomorrow. It is such a subtle point but increasingly it is becoming one of the central themes in how economies and organizations will evolve. Drucker's point is simple: for the entirety of the industrialized age, ownership has been the linchpin of organizational scale and success. Control over a value chain, a market, a partnership, an employment relationship, has required explicit ownership over the factors of production – if not outright ownership of the entire value chain. This has steadily eroded as highly vertically integrated industries have disintegrated into more molecular structures.

Process objects must be easily syndicated throughout an industry so that they can be shared by all of the current and potential participants of a value chain.

In the context of BPM this presents what may be the central challenge. How do disintegrated organizations align around strategy in the absence of ownership? Often, they end up understanding or owning pieces of the process, but lack the sense of cohesion that integrates process links into a reliable, integrated, flexible workflow.

Some see the answer in creating many vendor levels of integration, disabling any sense of focus on "what we do best" for the customer or partner. BPM is almost impossible in such a diffuse product or service environment.

Many see the key as control and ownership of Web transactions. Nothing could be further from the truth. Transactions take care of themselves, and are the least expensive or

complex aspect of the process. The people component is the most costly, and the way people use the process must be streamlined with easy-to-use tools.

The answer is simple in statement but has presented the daunting challenge of BPM. Process objects must be easily syndicated throughout an industry so that they can be shared by all of the current and potential participants of a value chain. The rules of these objects must be separated from their flow so that individuals can quickly alter the flow without being encumbered by the process rules; and the means of defining process flow must be accessible to everyone. The answer is a concept Delphi first introduced in 1994, The Business Operating System.

The Evolution of a Business Operating System

A Business Operating System (BOS) provides:

- A comprehensive work environment;
- A self-service, reflective desktop;
- A re-usable library-based repository of business objects;
- An open desktop that integrates the business process with any application;
- A constant and consistent interface allowing a process-centric view;
- A clear focus on Process Functionality rather than applications (i.e., word processing, spread sheets, databases); and
- A repository for the corporate processes memory

Operating systems have, until now, reflected the underpinnings of computers – the internal gibberish of file structures, directories, platform nuances, and procedural logic. If you are intimately acquainted with the minutiae of information technology, this makes perfect sense. If you are one of the millions who are concerned less with the 'how' of computing

In Search of Common Ground

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The quest for a common language by which businesses can transact has a long legacy. The most recent incarnations in the form of standards such as EDI (Electronic Data Interchange) and the WfMC (Workflow Management Coalition) have had some success but always within fairly closed communities of an industry grouping or closely coupled partners. The elusive goal has been to create a medium for broad-based coalitions of existing and potential partners. This has always been a catch 22 given the critical mass needed to attract users to a standard, which only results if users are already using it.

One school of thought is that a standard never will evolve and the idea of a BOS will fail in practice. Instead organizations will use their own conventions behind the firewall and then develop shared conventions between business partners as the need arises. Over time certain of these shared conventions will become norms for industries. The only real standards however will be the standards representing the tools and procedures used in defining the conventions.

This sort of an evolution undermines much of the promise of Web services, but it does not obviate their need, rather it compartmentalizes it by community. The most likely scenario is that the economic climate will dictate the enthusiasm, strategic investment, and level of innovation surrounding Web services. The more robust the economic climate the more likely we are to see the broad impact of Web services in the form of a BOS.

than the 'what', it won't. All of this should be transparent to the user. The rules, roles, and routing of the business process must be expressed in means that are compatible across platforms and plainly obvious to the most naive of end-users – what for some time Delphi has been calling the Business Operating System.

The Business Operating System acts as an intelligent broker that coordinates work and information across business processes. Only recently has the commoditization of computers and Internet connectivity made true process collaboration possible at this level of detail. Yet, without the commonality of a single operating environment for their processes, workers are forever hemmed in by the boundaries of different platforms, applications, and technologies. The organization is marked by needless atomization.

However, without a platform and an agreed upon set of standards the concept of a BOS has been elusive. Fortunately, this shows significant promise of changing with the advent of Web services, which make it possible to envision an entirely new operating system architecture based on the Internet paradigm of an open, shared application platform.

Imagine that such a new Business Operating System environment will be a desktop which consists of agents, each with a set of process rules that ultimately resides in a corporate process library; this is a form of corporate memory. The agents (think of them as sophisticated desktop icons or small applets) reference these rules and recombine them in multiple ways, depending on the needs of the user. However, in all cases, the rules are applied consistently and when a rule is changed in the repository, it is automatically picked up throughout the operating environment. In this sense the environment becomes the enterprise, value chain, industry, and economic memory.

With a platform in place to facilitate this, in the form of the Internet, the ultimate end game for Web services is the formation of a new industry of players, which we call Business Service Providers.

Business Service Providers

In the late 1970s, John Cullinane, founder of what later became the industry's pioneering applications vendor, Cullinet Corporation, was the first person to suggest the possibility of packaged applications that would embody the collective knowledge of many experts into off-the-shelf application programs. He was considered foolish by most, and outright insane by everyone else. Yet the Cullinane model became the standard for applications packaging during the last two decades. Accountants, engineers, marketing professionals, sales personnel and virtually anyone else looking at new applications would not think twice about using an off-the-shelf or one-off (i.e., a slightly customized version of an existing application) software application over a customized application designed and built from ground zero. That metaphor is now on the verge of changing again – just as radically as it did 30 years ago with the advent of what has been called the ASP model.

ASPs or Application Service Providers offer the equivalent of applications on loan. Simply put, they give you the option of using applications as you need them rather than purchasing expensive software. The applications and, in some cases, the data are hosted on a remote computer. Using an ASP, expensive and complex applications such as databases, enterprise resource planning, customer relationship management, and sales automation solutions can be hosted on a third party computer and leased by user organizations.

While the current herd of ASPs struggle with the outsourcing business model, a new breed of service provider has emerged which combines software subscription capabilities with deeply embedded vertical knowledge.

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With the creation of ASP environments users will no longer see, or even care about, discrete applications such as these or even standard applications such as word processing processors or spreadsheets; instead they will work within a hosted portal that stitches together the various component technologies and information sources they need to accomplish a particular task.

Many ASPs are chasing traditional outsourcing vendors in the hope of reviving their sputtering businesses. Their pitch is virtually identical to what their partners have used for the last 30 years – reducing the TCO (Total Cost of Ownership) for enterprise applications. The problem is, no one is buying it. Despite great aspirations, the market they serve today is largely comprised of low-margin web site hosting, not mission-critical applications. A recent survey by Delphi Group of over 1,000 major organizations showed that less than 15% had any expectations of using an ASP to host enterprise applications.

While the current herd of ASPs struggle with the outsourcing business model, a new breed of service provider has emerged which combines software subscription capabilities with deeply embedded vertical knowledge.

BSPs (Business Service Providers) are emerging as the central hubs for hosting collaboration within vortals and other communities of trade. These service providers offer a bundle of highly verticalized proprietary software with specific community-oriented domain knowledge, collaborative capabilities, and embedded business processes.

Rather than hosting horizontal applications for organizations on an individual basis, BSPs provide the computing platform for an entire vertical community. Emerging within industries ranging from construction to commercial finance, these BSPs provide a critical set of services to each vertical community.

Where the Cullinane model serves as the application prototype of the BSP, ADP (Automated Data Processing) is its business role model. ADP has built an empire

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around the seemingly mundane task of payroll management. In the process it has demonstrated the value of outsourcing processes peripheral to most organizations' core competency. Through a network of BSP partners, ADP offers the opportunity for business partners using its Qweb services to provide their members with not only payroll services, but management of T&E (travel & expense) accounting, human resource benefits management, and other employee related services.

Another BSP is Escrow.com who offers a variety of transaction management services. As with other BSP models, Escrow.com offers Web-delivered software services with embedded process knowledge surrounding transaction and financial risk management such as escrow services and international letters of credit. Like ADP, Escrow.com delivers this with a network of services partners.

Underlying the BSP model is a concept that offers a redefinition of traditional enterprise computing, one which takes an inside-out perspective of connecting with community partners rather than the inward-facing view of locally deployed applications. Forget DOS, think BOS – the e-Business Operating System.

The BOS is a process-based environment that encapsulates the unique knowledge of how business is run and the way people and information come together to add value to a business process within a specific trading community. From an architectural perspective, the BOS consists of a common operating environment (typically based on J2EE) and business process library, expressed through a consistent standardized Web-based environment.

Why is this so radical? Because it represents a level of process integration heretofore unknown. Think of the simplicity and process transparency of an online service such as ADP's payroll outsourcing, and then apply this notion to all the touch points across your value chain. That is the BOS – rather than simply presenting a Web interface to specific applica-

tions, with no explicit continuity among process participants, this new breed of ASP exists as the business process itself.

The heart of the BSP is the BOS. Layered on top of it are the business processes and business knowledge that define each BSP's unique differentiation. BSPs online today have deployed the BOS concept in fairly narrow slices, offering software and services first around discrete processes, such as bid development, and then loosely coupling them to related areas, which involve the same participants, for example project management.

This hub orientation of the BSP presents an obvious benefit here, allowing organizations to share centralized information from process to process. But it also points to the role of BSPs as service aggregators, leveraging this information to provide additional value-added services. The BSP which hosts the process and information for developing a bid between collaborating suppliers can utilize the same centralized data to generate a unified bill of materials, or generate compliance documentation incorporating each participant's specific data. Both of these are likely requirements of a collaborative bid and are particularly resource-intensive in the absence of centralized facilitator.

Why will the BSP succeed where ASPs have failed? Because the BSP model is community-based, rather than application-centric, it benefits from the dynamic of increasing returns. The more organizations within the community use it, the more valuable it becomes to all participants. What is critical to BSPs is an organic growth capability allowing them to grow exponentially, easily outpacing the growth path of the traditional ASP.

Choosing the Solution

As with any technology movement it is likely that the market space for BPM will become a crowded one requiring astute evaluators to consider carefully the solutions they choose. Today we are on the cusp of a third generation of business process management. The first generation is represented by the packaged

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applications of the 1980s. These are the philosophical heirs of John Cullinane, leading to the proliferation of ERP, HRMS, CRM and other specialized enterprise applications with business logic and business rules deeply embedded inside of executable code (and well out of reach to the average business user.)

The second generation of process management came in the form of dedicated platforms for building and deploying process-based applications. First emerging in the early 1990s as solutions for routing documents and scanned images, this family of software evolved into complex, two-tiered applications with sophisticated abilities for managing the state and integrity of business processes. The limitation of these systems, however, is that they failed to address the accessibility and visibility of business logic, but simply moved it from one stovepipe to another.

The emergence of third generation process management presents a new opportunity for business logic, the rules and conditions governing business process, to be liberated from the isolated islands of automation created by previous generations of applications. This generation of BPM provides a new layer of software to execute business processes across multiple applications, but within and beyond the traditional confines of the enterprise. To better understand the benefits and impact of third generation process management we have developed a conceptual framework with the five basic components described below.

The Five Components of Third Generation Business Process Management (3G BPM):

1. Processweb Engineering – build processes for core competency economies

2. Process Professionalization – provide the ability to create collaborative exceptions (the 80% of processes that cannot be defined by Generation 1 or 2 tools)

3. Process Independence – divorce flow from rules

4. Process Syndication – provide syndication of rules as business objects

5. Role-Based Process Organization – defining process components interchangeably to conform to roles rather than individuals

Each of these speaks to a series of supporting functions and features, which can be expressed in different products through different mechanisms. However, the fundamental components are essential.

Here is how each of these five components should work in practice:

Processweb Engineering
Two equal but opposing forces are defining the industrial and economic landscape of today's corporations. The first is the rapid consolidation of businesses through mergers and acquisitions. The second is the increasing trend towards partnering in all value chain activities. At first the commonality between these two is difficult to discern. However, both rely on tight partnering arrangements. Cleary M&A is the most intense form of partnering. To make either scenario work we need to substantially enhance an organization's ability to coordinate activities across a unified processweb. BPM provides this capability through business object libraries that can be mapped to the specific roles, IT tools, and process nuances of each participant.

Process Professionalization
The most challenging aspect of partnering and sharing business objects is that of adapting them to each individual's way of work. We call this process professionalization. It is the fundamental reason why most of use relatively simple tools such as Excel to do 80% of our work, outside of the corporate IT systems. Tools that allow for adaptation to My way of work are always preferential to those that require my adaptation to someone else's way of work. 3G BPM must work intimately with the professionalization tools that I am accustomed to. This involves "speaking" directly to existing desktop tools as well as legacy backend systems that need to be integrated with my

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desktop. Now imagine this challenge across a multitude of organizations and it becomes clear that 3G BPM is critical to any sort of complex partnering arrangement.

Process Independence

Past generation BPM restricted users to a process flow and process rules that were defined to meet the perceived needs of an entire community of users. Although there are clearly regulatory environments that mandate rigid adherence to business rules or process flow, even these involve sub tasks that fall outside of the reach of the "restricted" process. Ultimately it is these beyond the horizon parts of the process that slow down extended processes. They become the weakest links that must be accommodated somehow if significant process improvements are to result.

Divorcing the flow from the rules in such a way that users can evolve processes on their own without compromising the core integrity of the processes is essential for BPM solutions.

Process Syndication

Although it is still years off, the idea of a Web services architecture that allows for the syndication of processes as business objects is the ultimate end game of BPM. A process syndicate would allow businesses to share, barter, buy and sell core processes as easily as they buy and sell product and professional services today. The first step in this evolution is establishing a BPM architecture that allows for the creation of business objects that can easily be mapped to the flow of any organization's processes.

Role-Based Process Organization

The rapid mobility of people due to both technologies, such as wireless, and changing organizational cultures, that place greater value on fluid structures have established a mandate for role-based processes. In this environment, items of work should not be directed to individuals but rather to roles. Being able to map these on the fly as the organizations topography changes is critical. For example, BPM tools that use person-based routing for approvals are bound to be

plagued by the insurmountable problems of availability and immediacy of access. Role-based solutions will find the fastest track to a resolution by identifying the skills, competencies, and authorities needed to accomplish a particular task without regard to the availability of any one person.

Part II of this white paper will profile leading solutions in the market and preview results of Delphi's latest survey on BPM and Web services.

To order research from Delphi Group, including the full BPM and Web services report visit www.delphigroup.com or call Delphi at 617 247 1511

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