

The Industry's First Third-Generation BPMS

A BPMS Architecture Guide

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"One of the very few [vendors] in the marketplace that demonstrated the understanding of the ultimate vision of BPM" –Gartner Group Analyst September 24, 2006

Executive Summary

BPM holds great promise for enterprises of all sizes and in almost every industry. It offers both private and public organizations the opportunity to increase earnings and to meet other key business objectives such as compliance, IT alignment and improved governance. Companies wanting to become process-based competitors should choose 3rd Generation BPMS software technology such as Ascentn's AgilePoint, since AgilePoint optimally integrates people, culture and technology.

The AgilePoint story begins in 2002, when Ascentn's (a-sen-tin) founders set out to develop a radical new and easy-to-use BPMS. To accomplish this, the company created new visual [programming] tools for non-technical users, and innovated a dynamic n-tier architecture that separated [abstracted] process and rule metadata from underlying applications and infrastructure. Ascentn called their new architecture "dynamic" and "process adaptable" since it allowed non-technical users [when IT certified and permissioned by IT] to change metadata on-the-fly, which in turn enabled the business advantage. Four years later, this real-time [BPM software enabled] management vision, innovative programming tools and "dynamic" architecture was validated by industry analysts and customer adoption.

In this paper we discuss how Ascentn's AgilePoint meets all ten Gartner Group functional criteria for 2nd Generation BPMSs as of July 2006. We then define Ascentn's .NET metadata driven dynamic BPM framework architecture as the first of a third generation BPMS. We then overcome skepticism as to how a four-year-old company can have a more advanced architecture than virtually all other BPMS vendors.

Ascentn is currently not only a Microsoft Gold Certified Partner, but also a Microsoft Managed ISV Partner and an inaugural member of the Microsoft BPM Alliance. With Ascentn's AgilePoint BPMS solutions, Microsoft's .NET application platform can be literally transformed into a metadata driven dynamic BPM framework architecture. This solution enables a real-time management culture that is unachievable by any ranked BPMS vendor in the Gartner Group's July 2006 Magic Quadrant. Already chosen by Dell, Chinatrust, Siemens and Toyota, and with Schlumberger as an OEM, Ascentn's AgilePoint is one of the first 3rd generation BPMS designs.

We will show you why AgilePoint today, not only has the business-user-friendly process authoring of the far more costly Fuego/BEA, but Ascentn also aggressively promotes the business manager and IT collaboration like Savvion. In fact AgilePoint goes beyond Savvion's touted architecture feature of making the process repository searchable by non-technical business users. In fact, AgilePoint enables non-technical users [once trained by IT] to not only search metadata repositories (for process assets and business rules), but to also change the process and metadata in-flight (during runtime). In doing so, Ascentn business users can enjoy the agility and resulting business advantage of the industry's first, real-time-management culture.

Contents

Exe	cutive Summary	2
Pre	face	4
I. D	Pefining BPM and BPMS	4
	Defining BPM as a Management Discipline	4
	Defining BPM-enabling Software Technologies - the BPMS	5
	The Ascentn AgilePoint BPMS Vision	5
	AgilePoint Provides Unique Value to Both IT and Business	7
I. T	hree Generations of BPMS Evolution	8
	The Predecessors of 1 st Generation BPM	8
	1 st Generation Pure Play BPM	9
	Second Generation BPMS in July 2006	9
	2 nd Generation BPMSs Still Relies on IT Code-generation	.10
	AgilePoint Meets all 2 nd Generation BPMS Criteria	.10
	3 rd Generation BPMS will Re-emphasize User-facing Software	.11
	AgilePoint is the Industry's First Third-Generation BPMS	.11
Ш.	A Third-Generation BPMS Architecture	
	Overview	.12
	$lem:making on-the-fly Process Changes as Easy as Connecting Visio Stencils \ .$.12
	A New N-tier Architecture and New Business-user Visual SOA Tools	.13
	The AgilePoint N-Tier Architecture Separates Process Logic from the IT Infrastructure	.13
	Microsoft Has Validated the AgilePoint Architecture	.14
	Major Customers Have Validated the AgilePoint Architecture	.14
	The Differences Between AgilePoint and Other .NET BPM Solutions	.14
IV.	AgilePoint Leverages Microsoft Investments	15
	AgilePoint Leverages the Most Familiar Microsoft Business Tools	.15
	AgilePoint Leverages the Most Familiar Microsoft .NET Tools	.15
V. S	Summary	16
	Other Uses for Visual SOA Tools and Dynamic N-tier Architectures	.16
	There are still BPMS Inhibitors Today	.16
App	pendix A – Acronyms	16
Ann	pendix B - Key BPM Terms and Concepts	17

A BPMS Architecture Guide

Preface

Four years ago, Ascentn's (a-sen-tin) founders set out to develop a radical new and easy-to-use BPMS that is only now being recognized by top industry analysts as the industry's first 3rd Generation Business Process Management Suite (BPMS). Whereas the industry has talked for years about empowering users, Ascentn's AgilePoint's dynamic framework architecture and visual SOA tools are the first 3rd Generation BPMS. What's unique about the 3rd Generation is that it's architectures will actually put the ability to make metadata process and rule changes in the hands of non-technical business users. For the first time, enterprises can actually deploy a real-time management environment and gain business advantage over their competition in both operating cost reduction and innovation.

I. Defining BPM and BPMS

At a high level, the Ascentn AgilePoint BPMS vision is to overcome human factor and cultural barriers to BPM adoption, by presenting a user experience that makes it as easy as possible for non-technical business managers to embrace. Ascentn accomplishes it's Real-Time, Real-People-Ready BPM by using the best of both human factors engineering and software engineering. BPM is fundamentally a management discipline with organizational, strategic and other governance parameters and the most important BPM-enabling technology tends to be software tools arranged in BPMSs. The Ascentn vision set out to blend the best of science and social science to overcome the barriers to BPM adoption that still exist today in most organizations.

Defining BPM as a Management Discipline

BPM is something an organization can no longer ignore so it's important that you understand the three major types of BPMS available on the market today so that you can make an intelligent choice as to how to get started. Almost all major IT analysts believe that a modern enterprise risks being "left behind" if it does not embrace BPM as a management practice. Since BPM is fundamentally a powerful new management practice, it isn't something you can go out and buy. It's a way to first achieve "end-to-end" management of the 5-10 key processes that define your business and later to achieve the same for all the sub-processes that support your major business processes. Analysts also agree that now is the time to deploy BPM enabling software tools in order to bring "real time" process-based competition to the enterprise.

Business Process Management is a contemporary management discipline that treats business processes as assets and seeks to foster a near-real-time business process management culture, that fosters decision making agility and thereby competitive advantage. In this ideal real-time management culture, processes are championed by executives who are process-owners, and processes are managed by business managers, BPM-enabling software is updated on-the-fly in real time by process-specialists, and power is vested with process-managers in a matrix organization. Traditional functional and project based organizations of the past century, give way

to process-centric organizations. Process-centric thinking and a dedication to incremental process improvement overcomes the inertia and vested interests of traditional functional departments and change is welcomed instead of resisted. Exceptions are welcomed as opportunities for competitive advangage as opposed to the traditional mind-set of problems to be accommodated in programming code projects.

Defining BPM-enabling Software Technologies - the BPMS

It is important to logically separate the BPM management disciplines and associated management practices, from "BPM-enabling technologies." Although there are some non-software related "BPM-enabling technologies," the term typically refers to the software suites that are based on a common and well-integrated service-oriented platform. These BPM-enabling suites are known as Business Process Management Suites (BPMSs) and are at the heart of a subtle but profound paradigm shift that occurred in 2006 among the most forward thinking analysts. Modern Business Process Management Suites (Modern BPMSs) superceded earlier BPM enabling software tools in the mid to late nineteen-nineties which automated and visualized stagnant code generation techniques.

The Ascentn AgilePoint BPMS Vision

To Provide the Benefits of a Real-Time-Management Culture

Ascentn believes that only by decoupling process logic from the process layer and putting familiar and easy-to-use tools in the hands of business users, can the real-time-management culture that is promised by BPM be realized. In fact, tools to enable dynamic run-time process adaptability must be placed into the hands of the business managers who make the decisions in near-real-time.

Ascentn also believes that business process change and many levels of enterprise integration can be done at the higher and more intuitive business process level. Thus, the definition of Modern BPM [which we call 3rd generation BPM] to facilitate the delivery of business agility by non-technical business managers who are the closest to the core of the business processes at the company. This need has called for a new generation of architecture and process design tools

Ascentn defined that these new tools would have the following characteristics:

- Multi-layered architecture separating process (business logic) from underlying implementation. (i.e. as opposed to code-generation based architecture)
- Taking SOA to a new level by being able to abstract common services created by IT in the developers' domain and expose them in a simple organized visual [SOA as in reusable service and process components] context to non-technical user closest to the business.
- The visual SOA tools should be [exposed to] by IT or by other business users and reusable [consumable] by business managers from a process repository consisting of metadata of rules, process fragments and services.
- BPM is not just 'technology' but 'people' and 'culture' as well.

• Be equally useable in reducing operation costs and in fostering automation using incremental process improvement for innovation and competitive advantage.

Figure 1 – Characteristics of a Modern BPMS

Thus, Ascentn believed like many analysts that a Modern BPMS [3rd generation] is more than just being able to automate a pre-definable business processes. It must also be able to improve the process model through engineering cycles, and to regenerate a new point automation executable. The business agility to be delivered by a modern BPMS is greatly about PROCESS ADAPTABILITY. By this we mean a software tools that allows business users to adapting on-the-fly any running instance of a process model in order to meet specific real time business needs without having to wait for IT to re-code and redeploy. Ascentn's vision therefore was to enable this rapid process development [mass customization], at run-time, and business managers when initially permissioned and trained by IT.

"People-ready" as Opposed to Programmer-Ready BPM

Ascentn believes that a "People Ready" BPM should go a long way to overcoming the BPM human [] and cultural inhibitors to effective technology adoption. Most analysts believe that rapid change is impractical if not impossible if process logic is embedded in conventional applications. Achieving true business agility therefore is dependent on decoupling process logic from underlying IT infrastructure so that real-people can make changes to business processes to create a truly real-time management culture. A people-ready BPMS therefore should be readily useable by business managers with minimal training so that they can operate in as close to a "real time management environment as possible. The Development of BPM Technologies is enabling business managers to abstract process flows and rules from the underlying applications and infrastructure, and to change them directly. Abstraction and visualization are the keys to unlocking the value of technology for business-just as the history of the spreadsheet, object oriented development, e-mail, and the World Wide Web have demonstrated in recent years.

Cost-effective Integration of Technology, People and Culture

Ascentn's "People Ready BPM" positioning by explaining how important it is to overcome today's BPM inhibitors [organizational inertia, long learning cycles, vested cultural organization interests, and high cost of J2EE alternative and lack of .NET BPM frameworks. and presenting a user interface experience that utilizes familiar Microsoft tools.

A "People Ready BPM" should be a simple, comprehensive, and extensible platform that allows any business manager to access IT assets and build progressively sophisticated process-based solutions by diagramming them in Visio-while minimizing the need for IT involvement or outside help.

As a result, IT becomes a true business enabler by unlocking the potential of the average business manager and information worker. IT information assets are exposed in a Service Oriented Architecture as simplified abstractions. These abstractions are stencils of customizable .NET components called AgileParts that can be included to build executable Visio process models-allowing IT assets to be

leverageable for the first time outside of a developer-oriented environment.

In this way, IT is liberated and can focus on providing process execution, Web services, and information access components-without the burden of responding to every business change. At the same time, business managers and information workers are empowered to design and deploy business process models for ondemand automation by using the familiar environment of Visio.

AgilePoint Provides Unique Value to Both IT and Business

Ascentn uniquely blend both information science [software architecture and programming], and psychology (human) and social science (culture) by using familiar tools and UIs to overcome cultural resistance to change and enable a real-time management culture. A real-time management culture provides a business the agility to not only reduce operating costs faster than competition, but also to innovate new products and services faster than competition. With these key earnings objectives in mind, BPM software tools need to be useable in near-real-time.

The Business Manager Perspective

Ascentn believes that the fastest way to enjoy the benefits of a real-time process managed business culture was to "activate" [transparent to the business user] tools that they were already in widespread use [like Visio]. The company's vision for business managers was to give them "BPM activated" Visio stencils in their familiar Visio user interface so that this new activated Visio tool set could be instantly used with minimum training to make business process and rule changes in near real time. This is a key reason for thinking twice about choosing a BPM Suite that requires business users to learn an entirely new tool set. Visio is already here, there are millions of worldwide users of Visio, it's supported by Microsoft, so why not use it for your business. You probably don't want to find out down the road that your competitors chose an easy to use tool set and your BPMS project failed because it took too long to learn.

The IT Manager Perspective

Most IT professionals can appreciate the scenario of business-users and process-specialists building their own process assets and storing them in a process services repository. IT Professionals can also appreciate the scenario of permissioning and training business users to do 90% of the maintenance and customization of their business process applications. Well, these scenarios are here today in 3rd generation BPMS. Major IT analyst firms like the Gartner Group are beginning to evaluate future BPM-enabling software tools and architectures in terms of their benefit to user-facing business-process support. We aggressively promote business manager and IT collaboration as the fastest way for IT to enable the competitive advantage that has been promised for so long. The simple fact is that IT has to work itself out of a job and hand the BPM tools and as much of the change and maintenance of them to business managers.

We suggest that in the short term for a new BPM project that you first choose the right BPMS and we hope it's AgilePoint. Then we suggest you share short-term responsibilities with a process owner/specialist/champion in a particular business or process unit in which BPM will be deployed. This can immediately leverage your IT

assets by effectively bringing the process champion into the IT department but under your tutelage and control¹. If you are a .NET shop, this immediately leverages your .NET assets and skills you have instilled in the organization. Long term we suggest you concentrate more in strategic process architecture and how to enable new an innovative processes in the organization as the real-time- management culture rises on the wings of your new BPM empowered business managers. Even longer term we hope you stay abreast of changes in programming productivity and software architecture that will continue to evolve as software infrastructure and programming tools become more and more Visio-like for even non-BPM applications.

I. Three Generations of BPMS Evolution

The BPMS market space today is littered with BPM-enabling software products that were built on architectures from days gone by and most analysts expect a major shakeout before 2010. The BPM hype phase of the early 2000s had many companies reinventing worklow or document management technologies calling it BPM. And to make matters even more obtuse, the hype phase left the market littered with terms that are both misused and misunderstood. Now that the early adopter market phase has dawned, we set out to tell the Ascentn story of innovation. Toward this end, we have used a carefully selected set of acronyms [Appendix A], and a carefully selected set of terms and concepts [Appendix B]. We do this in order to communicate clearly not only with industry analysts but also with the IT and business professionals who are charged with BPMS evaluations, purchase and deployment. Accordingly we have selected our terms to be those used by top BPMS analysts such as the Gartner Group, Forester and others. We hope you find this approach useful.

Because so many vendor's jumped on the bandwagon in the BPM "hype phase" of 2000-2005, "buyer beware" are words well heeded in any BPM procurement today. Over the past five hears many workflow, BPR and EAI vendors attempted to reposition their inflexible solutions as BPM. What's worse is that not all self-claimed BPM point-solutions vendors are not modern BPMSs as we use the term in this paper. So its extra-important for both business and IT procurement teams to carefully understand the three basic types of BPM solutions they are likely to run across in the market place before buying. There is nothing more career-shortening than to be halfway into a BPM implementation, and have management realize that the BPMS won't do what the flashy PowerPoint presentations said it could.

The Predecessors of 1st Generation BPM

BPR was the first failed predecessor to Modern BPM and the second was Enterprise Application Integration (EAI). The BPR initiative was inspired from workflow automation that first appeared in the early nineteen-eighties in Electronic Document Management (EDM) systems. BPR attempted to provide software tools to re-engineer human-centric work and EAI attempted to provide software (largely system interfaces and "connectors") to re-engineer system-centric work and allow users access to stovepipe departmental applications for horizontal [cross-functional] business processes.

¹ An alternative is to provide an IT person the opportunity to go and live in the business units as a process owner, specialist or champion. So either way it's a winwin for IT.

Both BPR and EAI had the noble objectives of improving agility, worker productivity and reducing operating costs for the enterprise. However, both efforts largely failed and are remembered by many today by many long frustrating meetings between IT and their business manager counterparts. Both EAI and BPR required long learning cycles. Both often defined software tools or system "connectors" that outdated before software could be completed. Thus BPR and EAI both failed because they weren't flexible enough to be used by business users and were predominantly IT professional-led and frustrating to business users. In other words neither BPR or EAI were not really "People Ready," they were only "Programmer Ready."

Although they may have been ready for IT managers, a business manager almost had to be a programmer in order to keep up with rapid changes in the business world. This reliance on hard-coded human-centric and system-centric process flows was the fundamental flaw in both BPR and EAI respectively. Not only did the BPR and EAI failure deny the enterprise the ability it have promised, but their failure left a bad taste in the mouths of both IT and business management. In fact some management analysts today believe that BPR was a nineteen nineties attempt to computerize Fredrick Taylor's "management science" of the eighteen-eighties that sought to determine an optimal organizational structure and [process] workflows to perform each work task through scientific analysis of the work processes. If inflexibility was not bad enough, BPR gave the word "process" a bad name in the nineteen-nineties since both Apple Computer and Pacific Bell blamed "business process reengineering" as the reason for well-publicized major layoffs.

But not only did BPR get a bad name from associations with layoffs but the many programming productivity improvement schemes of the 1990s to help IT write code faster could not change processes fast enough. Although various methodologies were introduced to try to make IT coding more productive, manageable, such as UML, software factory, or even the latest SOA, they all failed because a real time management culture can't wait for any IT cycle. Coding delays had to be taken out of BPM and this meant that IT dependent incremental process change was not good enough.

1st Generation Pure Play BPM

1st Generation Pure Play BPM is suitable for creating point automation solution but not able to serve as the following because all automations have to be turned into a monolithic, rigid executable that can only be triggered time after time to achieve mechanical repetition of the same automation (mass-production) and not able to adapt each instance individually at run-time (mass customization).

With 1st Generation Pure Play BPM, process logic is generated into code and mixed with the underlying implementation – violating the modern BPMS characteristics. Once a process model is code-generated into a rigid executable – it is a monolithic, rigid, 'point' automation and can not be adapted to meet changes without resorting back to code changes to create a new executable.

Second Generation BPMS in July 2006

In mid July 2006, industry analysts defined 2nd Generation BPM as vendors providing complete BPMSs and simultaneously designated Pure Play BPM vendors

that had largely reinvented themselves in the early 2000s from EDM / BPR or EAI roots] as 1st Generation BPM. This paradigm shift validated the importance of business-user-led BPM [with IT support], instead of the other way around.

2nd Generation BPMSs Still Relies on IT Code-generation

Most vendors in this category claim their solution will empower business managers to create and maintain their own processes by using the services or features out of the box with little or no involvement from IT. Many times, these BPMS are being seen as a 'black box' that does what it does to minimize or avoid the 'conflict' between business and IT but does not address the fundamental flaw of 2nd generation approaches based on code generation. Further, many of these solutions achieve the 'business friendly' features through proprietary architecture that do not comply with the modern BPMS architecture characteristics.

AgilePoint Meets all 2nd Generation BPMS Criteria

As shown in Table 1, Ascentn's AgilePoint can be seen to fill all requirements of a second generation BPMS.

Table 1	AgilePoint meets al	2 nd generation	BPMS functional of	criteria.
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	AgilePoint BPMS 2 nd Generation Functionality Criteria			
Business and Technical Functions		Embedded	Bridged to/from	
1.	Human task support	Χ		
2.	Business process/policy modeling and simulation	X	X (Required: Microsoft Visio)	
3.	Pre-built frameworks, models, flows, rules and services	X		
4.	Human interface support and content management	X	X (Optional: Microsoft SharePoint, InfoPath, etc.)	
5.	System task and integration support	Х	X (Optional: Microsoft BizTalk)	
6.	BAM	Х	X (Optional: Microsoft SQL Reporting Services, SharePoint Portal)	
7.	Business policy/rule management support	X	X (Optional: Microsoft BizTalk, BRE)	
8.	Collaboration anywhere support	X		
9.	Runtime simulation, optimization and predictive modeling	(Partially)		
10	. Real-time agility infrastructure supports	X		

Note: Only the first 7 of 10 criteria were required by the Gartner Group for consideration in the Magic Quadrant as a 2nd Generation BPMS vendor in mid 2006.

Also in 2006, vendor comparison rankings shifted from Pure Play BPM to Business Process Management Suites (BPMSs). Confusing? Not really, since only business users, by definition are those closest to the business, and therefore the natural stewards of real-time management culture. Analysts knew that most Pure Play BPM vendors had re-invented themselves from either IT dominant document management (EDM), IT dominant human-to-human (H2H) Business Process

Reengineering (BPR) software solutions, or IT dominant system-to-system (S2S) Enterprise Application Integration (EAI) of prior decades.

"Rapid change is impractical while processes are embedded in conventional applications. BPM Industry Analyst – 2006.

The message has been squarely sent that the old paradigm of IT-led BPM could not be as agile as user-led BPM [enabled by IT professionals]. Since business-users were closest to the business [by definition] processes needed to changed and managed [dynamically] in near-real-time for optimal business advantage. Although it may be obvious, there is nothing more agile than the enterprise's ability to adapt to change in real time. Thus, the new thinking reflected their awareness of the need for a BPM-industry paradigm shift toward business-led process design and enhancement (with IT professional enablement) and away from IT professional necessity of coding to enable process change.

3rd Generation BPMS will Re-emphasize User-facing Software

Two back-to-back BPM paradigm shifts [2006 and 2007] may seem confusing at first. However, aligning IT and business has never been easy since it seeks a balance of people, technology and culture, and mixing science and social science is by definition something less that scientific. Ascentn believes that this evolution of BPM thought will soon result in the validation of Ascentn's founder's vision. Clearly real-time software tools must first be created and then secondly be made useable in real-time by management if a real-time management culture is to be achieved QED.

Although consensus among analysts has not been achieved, we believe that it is likely to describe and architecture that supports user facing business processes that looks very much like AgilePoint's dynamic n-tier framework architectures. We believe much importance will be placed on user facing software tools and will begin to define tools and architecture components that are necessary to implement these designs. Tools that would allow non-technical-users to enhancement of business processes in virtual real time will be emphasized.

AgilePoint is the Industry's First Third-Generation BPMS

The key reason that AgilePoint is a 3rd Generation BPMS, is that, AgilePoint enables non-technical business managers, process analysts and business analysts to directly change metadata (process models and business rules) on the fly AND without IT programmer involvement once IT has empowered and trained the non-technical person to do so.

Thus, AgilePoint defines a 3rd generation and leapfrogs the current market leaders since not only can non-technical business users <u>search</u> repositories for process and rule metadata, but AgilePoint users can also <u>change</u> the metadata during runtime to achieve a near-real-time business process management culture.

Table 2 – Possible new Criteria for 3rd Generation BPMS

AgilePoint BPMS 3 rd Generation Functionality Criteria			
	3 rd Generation Functionality	AgilePoint	Other BPMSs Today
1.	Metadata-driven Dynamic	Х	None

Framework		
2. Server Extensibility	X	Some
Handle non pre-definable human processes	X	Some
4. Un-predictable human exception handling	X	Few
5. Microsoft Office & productivity tool sets integration	X	Some

III. A Third-Generation BPMS Architecture

Overview

AgilePoint is obviously all about agility and how to achieve through 3rd Generation BPMS on-demand process automation and adaptability. AgilePoint visibility, granularity and granularity can be all the way down to an individual process instance. AgilePoint architecture is layered highly manageable, standards oriented and its UIs are understandable, mirrored and permissioned to both IT and/or business managers.

Making On-the-fly Process Changes as Easy as Connecting Visio Stencils

Ascentn set out to make process application change as easy as connecting stencils in Microsoft Visio. They reasoned that since Visio was already used by 80% of business analysts [and other business users] that if they "activated" the stencils that business analysts would be one step closer to being able to change process applications. Borrowing from SOA programming, Ascentn designed a set of new visual SOA tools and a new BPMS n-tier architecture that comprise AgilePoint.

The Ascentn team had learned from all the lessons of EDM, BPR, EAI and Pure Play (1st generation) BPM. Simply stated they knew that the new architecture had to decoupled process logic from underlying applications and infrastructure and be changeable by non-technical users. As we have discussed above, many 1st and 2nd Generation BPM solutions are re-tooled from IT-driven EDM. BPR and EAI architectures from 1990's and earlier.

These vendors have not been able to address the extreme ever-changing dynamic competitive landscape of business which are often marked by complex scenarios (the "green" area in Figure 1) involving unstructured, data, compliance issues, real-time collaboration, the need to handle new exceptions and the list goes on. Analysts have pointed out is 80% of the challenge for enterprises going forward.

Figure 2 – An architecture to manage today's H2H, S2S, H2S and S2H process flows

Demand for this need has attracted companies that originally deliver functional specific technologies such as business rule engines (BREs) to re-purpose their proprietary technologies for BPM to deliver a "point solution." These solutions address a portion of the dynamic operations challenges described above but proprietary and code dependent architectures do little to address the people and culture challenges described above.

The desire allow business managers to handle dynamic business scenarios involving many all combinations of H2H, S2S, H2S and S2H processes in real-time, by real-people called for a major new BPMS architecture.

A New N-tier Architecture and New Business-user Visual SOA Tools

Although most vendors are still struggling in re-tooling their architectures, many are only retooling them to SOA and not to businesses user friendly, visual SOA such as AgilePoint. AgilePoint has already solved the problem with it's n-tier architecture which underpins the new and easy-to-use visual SOA ["activated" Visio stencil programming tools. These tools are aimed at non-technical business-users, business analysts and the evolving group of business process managers. By definition Visio is easier to use by someone who is familiar with the UI and diagramming approach so tremendous amounts of learning curve are cut for the 80% of business analysts today that are estimated by Microsoft to use Visio.

The Ascentn architecture therefore blended both information science [software architecture and programming] and information social science [using familiar tools and UIs to overcome cultural resistance to change].

The biggest beneficiary of all however, is the IT professional who could at last step off the treadmill of constant code changes related to constantly changing landscape of business rules, business processes and exception handling. Thus a new near-real-time AgilePoint BPMS framework and architecture were born. One in which metadata could be changed on-the-fly, so that non-technical [but IT certified and permissioned] business users could gain the business advantage of agility.

The AgilePoint N-Tier Architecture Separates Process Logic from the IT Infrastructure

Process logic is separated from underlying implementation and preserved in XML from design to execution. XML is a key to AgilePoint components and bridged extensions to .NET applications to being able to bringing business users and IT workers together with common and understandable UIs. Instead of treating the BPMS as a "black box" solution as with some 1st and 2nd Generation BPM tools, this common framework minimizes the need for business and IT need to work apart. In fact IT and business users can use the same AgilePoint tools.

With a modern 3rd Generation BPMS like AgilePoint, selected IT assets or common services, process components can be abstracted to be exposed at the business layers. This allows business managers to change the business processes or business rules by changing the associated metadata in the process repository and deploy it for execution from the "process layer" in real time. Figure 3.) Thus, tremendous agility and competitive advantage can be derived from allowing the front office to change the process instead of waiting for the back office (IT) to do so. This flexibility is accomplished through AgilePoint's XML based architecture and dynamic metadata-driven framework architecture.

Figure 3 AgilePoint's N-Tier layered allows business managers to change processes and deploy execution from the process layer

AgilePoint is the only .NET BPM vendor to provide an n-tier, J2EE like framework architecture, in which process logic is de-coupled from underlying IT applications and infrastructure Thus Ascentn provides the IT professional with a solid software framework for IT code maintenance and revision. The Ascentn team applies deep domain expertise in framework design into AgilePoint. The AgilePoint design brings SOA to the next level by separating complex business process logic from application codes. Through this separation, IT gains greater flexibility in adapting to increasing demand from business units. IT can now convert the existing applications built throughout the years and newly built applications (IT Assets) into reusable objects, and further expose them in the Virtual IT infrastructure layer (Diagram 2). The IT Assets are now made visible through familiar Microsoft Visio diagramming shapes to allow IT and/or business managers to quickly remodel, refine and optimize their business processes and composite applications. The assembled applications within this Visio environment are fully executable processes represented in XML.

Microsoft Has Validated the AgilePoint Architecture

Ascentn is currently not only a Microsoft Gold Certified Partner, but also a Microsoft Managed ISV Partner. Microsoft recognizes that with Ascentn's AgilePoint BPMS solutions, the Microsoft .NET application platform can be literally transformed into a metadata driven dynamic BPM framework architecture that enables real-time management. Microsoft also recognizes that this is unlike any other .NET based BPMS vendor or for that matter any analyst ranked² BPMS vendor in either the J2EE or .NET space and that Ascentn is a valued partner in this respect.

Major Customers Have Validated the AgilePoint Architecture

Already chosen by Dell, Chinatrust, Siemens and Toyota, and with Schlumberger as an OEM, AgilePoint is quickly becoming recognized as one of the first 3rd generation BPMS designs. When customers see how easy it is for non-technical users to make on-the-fly metadata rule and process changes [while a BPMS instance is running], ROI analysis quickly becomes a formality. This is because customer's know they need to get started with BPM and finally here is a vendor that says they don't have to wait a year, or take slow and easy etc. We believe that when the word gets out and when the Gartner Group's next BPM [3rd Generation] MQ is published in 2Q 2007, that many more customers will appreciate the innovations that Ascentn's founders innovated four years ago.

The Differences Between AgilePoint and Other .NET BPM Solutions

We are often asked about the difference between AgilePoint and certain .NET based BPM tools that may at first glimpse look similar to AgilePoint. People are initially confused by the fact that some vendor's use Visio-like stencils and claim to leverage the .NET Microsoft framework.

Some of these vendors [like SourceCode/K2] do not even meet the requirements of most analysts to be defined as a BPMS vendor. Unlike it's .NET competitor SourceCode/K2, AgilePoint provides not only rapid application development services

² July 2006 Magic Quadrant

for process flows, but is a robust fully featured BPMS and not a productivity aid for administrative, form-driven and ad hoc departmental workflows, as K2 it is used by some Microsoft loyalists of today. For these reasons AgilePoint and SourceCode/K2 are not even in the same market segment and should not be confused.

Other .NET based BPMSs, while BPMSs, require extensive IT support and programming to become useable. This is because [unlike AgilePoint], these vendors lack an effective J2EE-like software framework. Although these companies profess to be equally agile with both system-centric processes, human-centric processes and all combinations in-between, the truth is that they are not. Therefore, other .NET BPMS vendors are not "people-ready" but rather "programmer-ready" and should not be confused with AgilePoint for this reason.

IV. AgilePoint Leverages Microsoft Investments

AgilePoint Leverages the Most Familiar Microsoft Business Tools

Ascentn's AgilePoint suite is built upon Microsoft technologies (Figure 4) which are without question the most familiar business tools globally. By activating Visio stencils and making them executable in real time, and providing a Visio-like user experience, Ascentn's AgilePoint BPMS leverages not only all familiar Microsoft application environments [human and cultural factors] but also leverages it's enterprise-class .NET application framework of reusable components.

Figure 4 – AgilePoint delivers the most practical and cost effective way to practice BPM

AgilePoint Leverages the Most Familiar Microsoft .NET Tools

AgilePoint Server is implemented by employing Microsoft .NET technology; AgilePoint leverages data caching technologies across all tiers, supports Process hydration/dehydration (Process Swapping) which enables better memory management, AgilePoint Meta data store employs several database techniques to optimize for high performance

AgilePoint Server architecture supports distributing entities such as AgilePart, a Sub Process or a Process activity of a particular process to be processed by its dedicated server (Server Cluster), effectively accomplishes application context based load balancing concept which provides flexible performance tuning options.

Client applications can communicate with AgilePoint BPMS Engine different ways [Figure 5] via HTTP/SOAP (Web Services), Remoting, WCF, Messaging (JMS/MSMQ) which provides flexibility in fine tuning performance needs. AgilePoint supports client applications able to run on their native environment and communicate with BPMS Engine. This offers customer's great flexibility in scenarios such as their front end Java Web Applications running on their enterprise hardware and software finely tuned to handle heavy volume retain their efficiency while interacting with BPMS Engine.

Figure 5 - AgilePoint supports client applications able to run on their native environment and communicate with BPMS Engine.

The Ascentn design philosophy is to allow enterprises to plan broadly and deploy

quickly, hence maximizing IT investment and allow businesses to stay competitive in the changing environment.

V. Summary

It's been a long road to understand true technology enabled BPM. But we've learned that one-time IT driven H2H automation of a pre-defined business process [as with EDM of the 1980s or BPR of the 1990s] is not BPM. We've also seen that BPM is more than one-time S2S automation [through application connectors] with EAI. In fact, the promise of "real-time management" that BPM offers can't realized by just speeding-up application programming cycles as the analysts paradigm shift away from Pure Play BPM products [reinvented BPR/EAI] to BPMS has validated. In fact, any IT driven change cycle is by definition less than optimum since it means the business can't adjust in real-time or near-real-time.

Other Uses for Visual SOA Tools and Dynamic N-tier Architectures

Ascentn believes that this paradigm shift is not only limited to BPM but applicable to all software. If business users can maintain and enhance running BPM instances on-the-fly with "activated Visio [visual] templates," this same visual SOA programming approach can enable business user participation to composite application programming in areas other than process.

There are still BPMS Inhibitors Today

Although much progress has been made in making it easier to reap BPM benefits by using BPM enabling software tools, there are still many thorny problems to overcome before BPM software becomes widely adopted. The major inhibitors are both cultural, and human factors in nature. Organizational inertia leads the pack of inhibitors and early J2EE BPM efforts have only fueled this objection by creating BPMS with long learning cycles and high cost.

An irony of business application software is that the major packaged applications are not BPM friendly since they hard code process logic to the data. Another irony is that the most commonly used business manager tools [i.e., Microsoft tools] have not been truly BPM activated until the advent of Ascentn's AgilePoint BPMS. This is in addition to the misconception from the IT viewpoint that all .NET BPMSs except Ascentn's AgilePoint lack the discipline of a "framework" for the true exploitation and management of process and content repositories.

Most analysts will tell you that the BPM hype phase has transitioned to the "pilot project" or "early adopter" phase and that your should get started so as not to be left behind your competitors. Although it's too early to chose an enterprise-wide BPMS standard, we hope that you will now understand that betting on Ascentn is a very low risk, high benefit, low cost way to deploy BPM for both business users and IT professionals alike.

Appendix A – Acronyms

BAM

business activity monitoring

BPA business process analysis

BPM business process management

BPMS business process management suite

BPR business process re-engineering

BRE **Business Rules Engine**

EAI Enterprise Application Integration

EDM Enterprise Document Management

J2EE Java 2 Platform, Enterprise Edition

H2H human-to-human

MQ Magic Quadrant

OEM original equipment manufacturer

POA process-oriented architecture

S2S system-to-system

SOA service-oriented architecture

TQM total quality management

UI User Interface

XML Extensible Markup Language

Appendix B – Key BPM Terms and Concepts

Abstraction (of the process from its

implementation)

BPM-enabling technologies

BPM is a management discipline

BPM requires both organization and

technology change

BPMS tools = orchestration engine, BI and analysis tools, BREs, repositories, integration tools and connectors

BPR gave "process" a bad name

Business analyst

business manager

business process automation

business user

business-user-friendly

business services repository

composite applications

flexibility depends on a large library of

exceptions

inertia and vested interests inhibit organization change

human-intensive process steps etc.

incremental process improvement

integration servers

metadata (processes, rules etc)

non-technical business professionals

near-real-time

paradigm shift to business users

process analyst

processes asset

process authoring

process automation

process-centric organization, thinking

etc

process components

process hierarchy

process improvement cycle

process lifecycle

process managed culture

process owners

process registry/repository

process specialist

process visibility

packaged application supplier

80% of business analysts are trained

in Visio

real-time management culture

run time

system-intensive process steps etc.

vertical (and/or) horizontal processes