The State of Business Process Management 2014

Paul Harmon
Celia Wolf

Contents

Introduction

This report summarizes information provided by 309 respondents who participated in our BPTrends survey in the fall of 2013. The report analyzes the responses and compares them with the responses from the four previous BPTrends surveys that were conducted in 2005, 2007, 2009 and 2011. We hope this survey will provide benchmarks that the Business Process Management (BPM) community can use to gauge the evolution of BPM.

The respondents to this survey are members and/or readers of BPTrends and reflect the perspectives of a broad base of business managers, BPM consultants, BPM practitioners, and business analysts from a broad cross section of international organizations interested in BPM.

Given the size and diversity of the respondents, we believe this is the most comprehensive and representative overview of how organizations understand BPM, what BPM activities organizations are currently engaged in, and what BPM activities organizations are planning for 2014.

Business Process Management or BPM has been high on most lists of important business topics since 2003. Most people think of BPM as the logical continuation of the interest in business processes that started in the Eighties and reached a crescendo in the mid-Nineties with Six Sigma, Business Process Reengineering, Workflow, and ERP software. Because of its extensive roots, and because there are several new approaches included in today's discussions of BPM, it is difficult to develop a clear definition of BPM. Like any phrase that is comprised of familiar words and embraced by a number of different communities – including executives, business process consultants, business analysts, Six Sigma practitioners, business architects, CIOs, and software developers – the phrase *Business Process Management*, or *BPM*, means different things to different people. There's little we can do to force uniformity on such a diverse and rapidly changing practice but we can identify the different ways the term *BPM* is used and report on the goals of each of the different groups using the term. To minimize confusion, we wrote multiple-choice questions and tried to provide precise descriptions in an effort to assure that everyone understood the choices.

This survey has been conducted five times, in 2005, 2007, 2009, 2011, and in 2013. In each case we conducted the survey in the fall and then issued the report at the beginning of the following year. We have used more or less the same questions in each survey in order to develop a sense of the development of the BPM market. We believe this constitutes the best longitudinal survey of the development of the BPM market in existence.

Throughout this Report, we use a number of terms we assume are familiar to most readers. Specifically, we have assumed readers are familiar with (1) the way BPTrends classifies business process software products, with (2) Carnegie Mellon University's Capability Maturity Model Integration (CMMI) which identifies five process maturity levels, with (3) the BPTrends BPM Pyramid that describes processes in terms of three levels within an organization – the Enterprise Level, the Process and the Implementation Level, and with (4) Geoffrey Moore's way of classifying the development of technology markets. For readers who are unfamiliar with any of these terms and concepts, we have included explanations in Appendix I, *Concepts Used in this Report*.

We are grateful to the many BPTrends members and visitors who participated in the Survey. Without the many respondents who took the time to fill out our questionnaire, we couldn't have produced this Report. For our part, we have reported and summarized the data as accurately and fairly as we could. We also want to thank Paul Heidt for his work producing the tables included in the report and Carolyn Potts for her editorial contributions. In addition, this year, we want to thank Robin Barnwell of Process Advisors in the UK and John Prouty and Carl Green of MetaPower, a US consultancy, for help with the statistical analysis and graphic presentation of the results. It's been beneficial to have conversations with others who can provide different perspectives on the results.

As always, we welcome readers' comments and suggestions regarding this Survey as well as your suggestions for topics and issues you would like to see included in future reports.

Finally, we hope this Survey Report will provide readers with insights that will suggest new ideas for future developments in your own organizations.

Celia Wolf
CEO/Publisher/BPTrends
cwolf@bptrends.com

Paul Harmon
Senior Market Analyst/Executive Editor - BPTrends
pharmon@bptrends.com

Executive Summary

This is the fifth comprehensive BPM market survey that BPTrends has undertaken. In the first Survey Report in 2005 we established the basic trends in the process market and we have continued to track and report on them in our 2007, 2009, 2011, and this, our 2013 Survey Report. This has been an interesting time to observe the market. In 2005 there was great enthusiasm for a variety of process change initiatives, much of it focused on the possibility of using BPMS tools to automate the management of business processes. By 2007 the US saw the beginning of a financial crisis that became a major recession in 2008 and economic activity has been depressed ever since. The recession has slowed economic activity in some parts of the world, like the United States and Europe, while other areas, like China, Australia, and Canada, have remained relatively unaffected. These conditions make it difficult to separate trends in BPM from alternations that resulted from changes in the economy that have little to do with BPM.

In 2011 it appeared that there was a change taking place in the BPM market. For the first time since we began gathering data, there are clear indications that some organizations are becoming more mature in their approach to process work. At the same time, it seemed that organizations were beginning to embrace the use of Business Process Management Suites (BPMS) and that process management software was being more widely used in 2011 than it was two years prior. We looked forward to see if the trends that seemed apparent in 2011 were also present in the 2013 data. It isn't. In 2013 the overall pattern of responses is very much like the pattern in 2007 and 2009.

The strongest conclusion that can be drawn from this report is that it provides a very solid description of the business process situation today. We have asked the same questions for a decade now and gotten the same answers. The respondents have changed, have grown and declined, included more business people and then more IT people, and through it all the answers to our questions remain the same. They changed a bit in 2011, but returned to the "standard pattern" in 2013. Most respondents think that BPM is about managing process change throughout the business. They don't think it simply refers to a new software technology. Most organizations are at Level 2 on the CMM maturity scale. They have invested in defining their processes, but have not invested in aligning processes throughout the enterprise.

The second major conclusion is that there has been little development in the market, as a whole. Individual companies may have become more process oriented, invested in BPMS or created a business process architecture, but most companies have not. The state of BPM, as we defined it in 2005 is roughly the same today.

In 2013, as in all years that we have surveyed organizations, the dominant concern is to reduce costs by making processes more efficient. Companies continue to spend money on BPM initiatives precisely because they hope that investments in process work will enable them to become more efficient and productive.

Most organizations spend under $500,000 on process work in the course of a year. Over the course of time a few have moved up and spend more, but there is hardly a rush to spend more on BPM – nor would we expect one during a recession.

There are, of course, many different ways to approach process improvement. Some focus on Six Sigma or Lean and hope to achieve incremental improvements in specific processes. Others invest in automation in hopes of long term reductions in labor costs, and still others invest in major process redesign efforts or in management initiatives designed to better coordinate all process efforts. Broadly speaking, investing in better coordination and management of process work has been on the rise, while incremental approaches are slowly declining, or at least being integrated into larger, organization-wide BPM initiatives.

Google provides a very nice research tool, called Google Trends, which you can use to see how two or more terms compare in search results on Google (the top set of trend lines) or references in news stories (the bottom set of trend lines). Pictured below in Figure 1 is a "search" on Google Trends on four terms: BPM, Six Sigma, Lean Six Sigma, and Business Architecture which we undertook in 2011. When we undertook the same search in the fall of 2013, the results were exactly the same – all of the trend lines simply continued as they do in the 2011 figure. As you can see, BPM is holding its own both in terms of Google searches and as a news topic. Six Sigma, on the other hand, has been slowly declining as a search topic, and hasn't been getting nearly as much attention in new press releases. Lean Six Sigma and Business Architecture are barely noticeable in either case. We can't search on "Lean" as there is too much ambiguity as to the meaning of the term. Also keep in mind that we are dealing with very large numbers and while there are actually quite a few searches on Lean Six Sigma, the total simply doesn't rise to the volume of BPM or Six Sigma searches.

The trends pictured in Figure 1 reflect our own data. Organizations continued to be interested in BPM throughout the recession and, more important, they continued to invest in process projects, especially those that seek to coordinate and manage organization-wide process efforts. The market hasn't grown much during the recession, but it has held its own, and has very gradually improved.
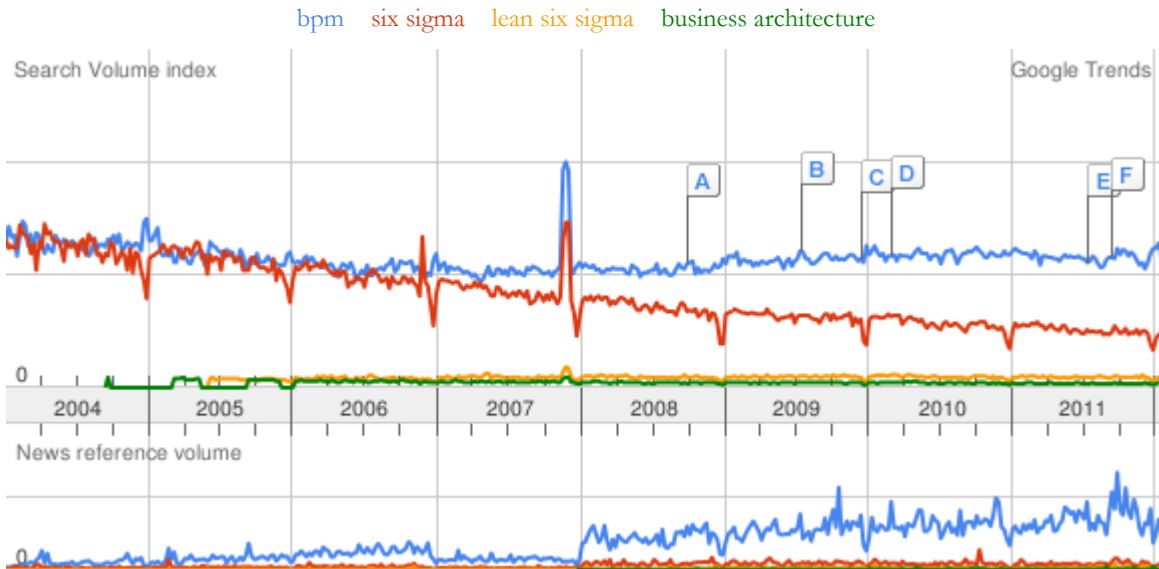
Figure 1. A comparison of BPM and other disciplines on Google Trends. [A]

When we undertook the BPTrends survey in 2009 we knew we would get results that reflected the general business slowdown, and we tried to temper our remarks in the 2010 Survey Report to avoid turning a slowdown into a trend. That position was well justified as we look at the 2011 data. As a very broad generalization, we had about 300 respondents in 2005 and about 399 in 2011. In 2007 and 2009 we had about 250 respondents. Most of the indices in 2007 and 2009 showed the process market slowing down or standing still. The 2011 data, by contrast, indicates that the market for BPM is growing.

In 2005 28% of all respondents said their executives regarded BPM as a major strategic commitment. In 2007 it was down to 26% and in 2009 it was down to 19%. In 2011 it jumped to 31%. As we said, it is as if 2007 and 2009 didn't happen. In 2013, overall support for BPM has remained the same, but the commitment to BPM has shifted from the executive level to projects throughout the organization.

In 2005 respondents were overwhelmingly from North America and Europe. In this year's survey, as in 2011, we have significant groups of respondents from Europe, North America, and South

America, and growing groups of respondents from Australia and the Middle East. We even have our first respondents from India and China. Clearly the interest in BPM has spread around the world.

What is much more exciting is the increase in process maturity. We judge process maturity by using an approach originally developed by SEI at Carnegie Mellon University called the Capability Maturity Model (CMM). An explanation of this approach is provided in Appendix I for any who may not know of it. We ask a number of questions each year to help us gauge the process maturity of respondents' organizations. In each question, we ask about a particular type of process work and ask if the organizations ever do it, do it occasionally, frequently, most of the time, or every time. We assume that organizations that undertake certain process tasks more frequently are more mature.

Below the average for 2013, we show averages for 2011 (in red), and 2009 (in black). Once again, the averages show how the response pattern in 2013 is more like the patter we observed in 2009 than the one we saw in 2011.

	Never	Occasionally	Frequently	Most Times	Always
Processes Documented	3%	49%	29%	17%	2%
Standard Processes	5%	51%	26%	17%	2%
Value Chains Modeled	11%	41%	24%	19%	5%
Measures for Major Proc.	14%	55%	17%	12%	2%
Consistent IT Support	9%	54%	24%	12%	2%
Skills Defined	12%	49%	24%	14%	1%
Managers Trained	24%	52%	15%	5%	4%
Managers Use Data	13%	55%	21%	10%	2%
Process Improvement	11%	50%	26%	12%	1%
Average for 2013 Survey	**11.3%**	**50.6%**	**22.8%**	**13.1%**	**2.3%**
Average for 2011 Survey	**10.8%**	**39.0%**	**25.0%**	**18.9%**	**6.0%**
Average for 2009 Survey	9.7%	46.1%	23.9%	16.5%	3.9%

Figure 2. Questions about the frequency of specific organizational activities that suggest organizational maturity.

For many, BPM has always been strongly associated with BPM software. It isn't a tight or necessary conjunction: One can do process work without considering BPMS tools and many do. On the other hand, nearly everyone appreciates the idea that it would be convenient if a process manager, say a supply manager at a large organization with worldwide supply lines, could look at a computer screen and get an up-to-the-moment summary of where things are in the supply chain and where any bottlenecks or quality problems are developing. Similarly, anyone involved in finance can appreciate how a loan committee would like to be able to make adjustments in loan rates or charges, quickly, without having to request that IT reprogram software systems. In essence, these are the promises that BPMS vendors have been offering since they became active in 2003.

The problem with any new technology is that it takes time to incorporate it into applications that deliver measurable improvements. Thus, there have been claims from vendors and reports from early adopters of both early successes and failures and, gradually, a track record has emerged. BPMS has been a difficult technology to assess because it has mutated as it has developed. What began as workflow soon incorporated business rules, process modeling, business intelligence, and process mining. Simultaneously, the technology shifted its infrastructure from a client-server based to an SOA or cloud-based technology. The rapid evolution of BPMS products and the many vendor acquisitions have made it difficult for organizations to evaluate the functionality and the benefits of

the various tools. As a direct consequence of both the recession and the rapidly changing BPMS offerings, most companies have not rolled out large scale BPMS implementations, choosing, instead, to experiment with a variety of tools from different vendors.

We have often observed that many organizations purchased BPMS tools long before the organizations were mature enough to use the tools effectively. An organization needs to understand and redesign its business processes so that they are reasonably efficient before the organization can benefit from automating them. In the worst case, some BPMS vendors repeated the mistakes of some ERP vendors and encouraged organizations to "pave cow paths" when they would have been better off advising them to wait to automate until they had explored the possibility of "creating freeways." As a result, time has been wasted, some experiments have been unsuccessful, and the market, as a whole, has not developed as fast as the BPMS vendors had hoped.

Data from our 2007 and 2009 surveys support this assertion. There has been gradual growth in BPMS sales, but there has not been a surge. In 2011, however, we thought we detected the beginnings of a significant increase in sales, but that has faded in 2013. Consider the answers to two questions.

When we asked what BPM products organizations were using, respondents said they were benefiting from the use of a BPMS suite, as follows:

2005	2007	2009	2011	2013
23%	24%	26%	37%	24%

And, when we asked what BPM products organizations were considering purchasing, the responses reported the following with regard to BPMS:

2005	2007	2009	2011	2013
11%	25%	21%	29%	12%

In both cases there seemed to be a change in 2011 but that has disappeared in 2013. In hindsight, we had more respondents in 2011 than ever before and they clearly skewed our results somewhat. This year we have fewer respondents and the same pattern of responses we have had in earlier years. We assume that this year's result represents the "typical BPTrends reader" who is more likely to be a business manager or practitioner, and that the 2011 pattern represents a deviation because it had more respondents who were based in IT and were interested in BPMS.

Figure 3 describes the various activities and levels where respondents expect to see more spending in 2014 (in blue). The percentages in black represent the responses from the 2009 Survey and the percentages in red represent the responses from the 2011 survey. In some cases the numbers stay the same from 2009 to 2013, and in a few cases, they drop – but in some areas, they jump. Importantly, the area where we see the most activity is at the enterprise level. The core idea behind BPM – that organizations ought to coordinate their process efforts and manage processes as an asset - is catching on. To support these efforts, companies are developing the business tools they need – things like a business process architecture, business process measurement systems, and business process governance systems – to do Business Process Management on an enterprise scale.

As with maturity, we are not suggesting that all organizations are rushing to invest in a process architecture. Instead, a modest number of organizations, probably mostly organizations that were already interested in becoming process-focused, are investing in the future by significantly improving their process management capabilities.
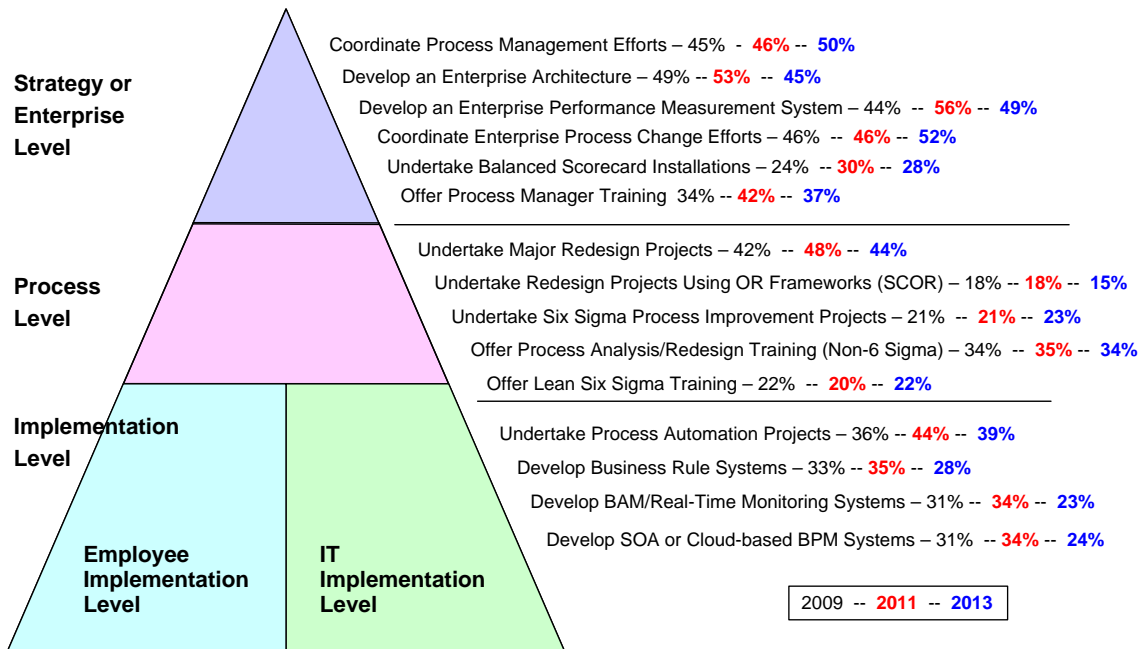
Figure 3. Respondents indicating where their companies will be doing more in 2014

The 2013 survey covers a wide variety of process concerns in more detail than we can go into in this overview. The bottom line, however, is that, in spite of an uptick in 2011, the 2013 survey data suggests that the BPM market is evolving slowly and steadily.   The broad patterns we have observed since the survey began remain the same. Most organizations are occasionally working at BPM. At the same time, a few leading organizations continue to make significant investments in BPM.

It's probably too early to be sure that the recession is really ending, but it certainly feels like the recovery is underway in North America. We expect that there will be quite a bit of growth in BPM in 2014 and fully expect that over the next several years, organizations throughout the world will have used Business Process Management techniques and technologies to achieve significant improvements in productivity and growth.

_____

[A] Google Trends provides a check to assure that the trend lines reflect the topic being searched. The letters attached to the BPM trend line provide references to specific stories in which the term BPM is used. All refer to stories that involve Business Process Management.   We tried to examine "Lean" as a stand-alone term and found that we could not. A search on "Lean" pulled stories on a wide variety of topics, few of which were related to "Lean" as it is used in the BPM or TPS communities.

Note: In compiling totals for the Figures representing Respondents' answers, we rounded the total percentages to 100%, even though in some instances the percentages added up to 99% or 101%.

How Organizations Understand BPM Today

We began this survey by asking all respondents to tell us how they understood the term "Business Process Management," how they would characterize their organization's current interest in BPM, and what they thought was driving BPM at their organizations.

The Meaning of BPM

People use the term "BPM" in many different ways. Some use BPM to refer to "Business Process Management." Others use BPM to refer to "Business Performance Management." Some use BPM to refer to a general approach to the **management** of process change, while others use it more narrowly, to refer to the use of software techniques to control the runtime execution of business processes.

To better understand how our respondents use the term, we asked them to choose among four options, or to suggest an alternative to the four options we presented (see Figure 4).

Which of the following best describes your organization's understanding of BPM? (Choose one)						
	2005	2007	2009	2011	2013	
A top-down methodology designed to organize, manage and measure the organization based on the organization's core processes	40%	40%	36%	41%	31%	94
A systematic approach to analyzing, redesigning, improving and managing a specific process	26%	29%	34%	27%	32%	95
A cost-saving initiative focused on increasing productivity of specific processes	12%	13%	13%	15%	18%	55
A set of new software technologies that make it easier for IT to manage and measure the execution of process workflow and process software applications	16%	9%	8%	13%	9%	27
Other, Please Specify	6%	8%	9%	5%	10%	31
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**302**

Figure 4. How organizations understand BPM.

There has been no major change in how respondents answered this question over the course of the past 10 years. In 2011 it looked as if those who thought BPM was a software technology (what we would term BPMS) had risen a little, but this year the results look closer to the results we obtained in 2007 and 2009 than to those we obtained in 2011.

We suspect the return to the 2009 pattern reflects the fact that we have fewer respondents from IT or from vendor organizations and more from business and Lean and Six Sigma.

As with every question, we applied a variety of data filters. Thus, we checked whether Europeans were more likely to think BPM meant something different from respondents in North America. Or whether more mature organizations answered differently than less mature organizations, and so forth. In this case there was little difference in perspectives. You may assume the same applies to other questions we consider unless we cite specific differences.

Overall, the most important conclusion in the case of this question is that people differ as to the meaning of the term "BPM." Some people think BPM describes a systematic approach to managing

and improving specific processes while another larger group considers BPM to be a top-down, organization-wide approach to process management. Only a few think BPM is a software technology, but that group has remained constant over the past eight years and seems likely to continue to do so. Most software vendors continue to refer to their products as BPM products and that certainly confuses some people. Anyone writing or talking about BPM needs to keep in mind that he or she is addressing a diverse audience and needs to carefully define how he or she intends to use the term BPM.

The Current Interest in BPM

We asked all respondents to describe their organization's current interest in BPM. If one looked at the 2011 results, one might have been inclined to suggest that BPM was becoming more strategic, but the 2013 results suggest that was a fluke, and that today, the overall commitment is to major process redesign work or to multiple process improvement efforts.

How would you characterize your organization's current interest in BPM? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Major strategic commitment by executive management	28%	26%	19%	31%	21%	62
Significant commitment to multiple high level process projects	23%	24%	33%	30%	32%	97
Initial commitment to limited number of mid or low-level projects	23%	25%	29%	26%	33%	100
Exploring opportunities	21%	23%	16%	12%	11%	32
No interest	6%	2%	3%	2%	3%	10
Total	**101%**	**100%**	**100%**	**100%**	**100%**	**301**

Figure 5. The current commitment of respondents' organizations to BPM

As you might expect, a few more companies in Europe and North America had made major strategic commitments to BPM than elsewhere, but there are organizations throughout the world that have made strategic commitments, and the overall pattern pretty much reflects all companies in the world. On the other hand, there is a relatively strong correlation between a major or significant commitment and maturity and spending. Committed companies are more mature and spend more.

Business Drivers of BPM

A **business driver** refers to a situation, strategy, or goal that motivates management to support business process change. Historically, the two leading drivers of business process work have always been:
       (1) the need to save money
       (2) the need to improve an existing process or to create a new business process.

Other important traditional drivers are the need to:
       (3) improve customer satisfaction
       (4) improve organizational responsiveness
       (5) improve business coordination and control.

More temporary, ad hoc drivers can be:
       (6) compliance with new regulations like Sarbanes-Oxley and IT upgrades
       (7) one-time events like a merger or acquisition.

In 2005 we asked respondents to choose THE single major driver. In 2007 and 2009 we asked respondents to choose the major drivers and let them choose more than one.

In 2013, as in all previous years, the major driver was the "need to save money by reducing costs and/or improving productivity." The second most important driver, in 2013 was the "Need to improve customer satisfaction to remain competitive." The "need to improve management coordination or organizational responsiveness" dropped to third place (see Figure 6).

What are the major business drivers causing your organization to focus on business process change? (Choose one or more)						
	2005	**2007**	**2009**	**2011**	**2013**	
Need to save money by reducing costs and/or improving productivity	33%	56%	56%	57%	54%	161
Need to improve existing products, create new products or enter new lines of business to remain competitive	19%	36%	36%	28%	34%	101
One time event (merger or acquisition)	2%	4%	4%	4%	3%	10
Government or business risk management(Sarbanes-Oxley, ISO 9000)	11%	17%	17%	13%	13%	40
Need to improve customer satisfaction to remain competitive	19%	37%	37%	31%	37%	111
Need to improve management coordination or organizational responsiveness	23%	51%	51%	38%	35%	105
Need to improve management of IT resources (ERP applications)	9%	19%	19%	17%	18%	53
Other, Please Specify	9%	11%	11%	4%	11%	32

Figure 6. Business drivers causing organizations to focus on business process change.

As you can see, in 2007, as the recession set in, the need to save money became a little more important to respondents, and that has yet to change.

Process Maturity

We asked respondents to tell us how their organizations performed a number of business process activities, ranging from process documentation through modeling and process management. In each case, we asked whether their organization *Never* did it, did it *Occasionally* (1-30% of the time), did it *Frequently* (31-60% of the time), did it *Most Times* (61-99%), or *Always* did it (100% of the time).

We asked these questions because we wanted to get an idea of where most organizations were in mastering and performing common business process activities. We set the questions up to suggest a maturity scale, like CMMI. If organizations "Never" performed common BPM activities, we assumed they were immature organizations that weren't focused on processes (CMMI Level 1). If organizations "Occasionally" performed most of the common business process activities, we assumed that would suggest they were around Level 2 on a CMMI scale. Likewise, if organizations "Frequently" performed most of the common business process activities, we assumed that would suggest they were around Level 3 on a CMMI scale. Organizations that performed most of the activities *Most Times*, we assumed that would suggest that they were around Level 4 on the CMMI scale. For those unfamiliar with the CMMI maturity scale, it is described in Appendix I.

We will consider each part of the question independently and then consider the overall results.

Are Work Processes Documented?

We asked if work processes were documented and kept up to date. Any organization that undertakes a process redesign or an ISO 9000 certification effort must create some kind of process documentation. Only companies with a real commitment to processes, however, have a system that consistently maintains process documentation. We weren't surprised that most respondents had some kind of process documentation, and we weren't surprised that only a few have a systematic way of keeping their documentation up to date. (See Figure 7

)Are business processes documented and kept up to date? Please indicate your organization's overall level of performance. (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Never (0%)			3%	3%	3%	10
Occasionally (1-30%)	46%	55%	46%	38%	49%	144
Frequently (31-60%)	24%	24%	30%	31%	29%	87
Most Times (61-99%)	23%	14%	17%	22%	17%	49
Always (100%)	4%	4%	5%	5%	2%	6
Total	**97%**	**100%**	**100%**	**100%**	**100%**	**296**

Figure 7. Work processes are documented and documentation is kept up to date.

In 2011, we noted that the answers to this question, and subsequent questions in this section suggested that, compared to past years, more companies are doing things *Frequently, Most Times*, or *Always,* than in the past. It wasn't a big difference, but as one looked across all the responses, it seemed like a definite trend toward more maturity.

This year, on this question, and on many of the other questions in this section, we seem to see a pattern more typical of 2005, 2007 and 2009. In other words, respondents are again suggesting that most organizations are doing things *Occasionally* – a pattern we identify with a CMM Level 2 organization – rather than *Frequently*, or *Most Times*. Let's continue to examine data in this section, and then, later, we will speculate what this reversion to a previous pattern suggests.

Do Units That Perform Similar Activities Use Standard or Similar Processes?

Many large companies perform similar processes throughout a variety of different divisions, business units, or geographical units. For example, all sales units have processes for documenting the existence of a prospect, or keeping track of customers and pending orders. Obviously, efficiencies can be achieved if all of these similar processes are consistent. Thus, it would be good if every unit or division within the organization gathered the same information on customers and entered it in the same way in the same database. It would mean that employees would be more inter-changeable, that enterprise information would be more consistent, and that the organization would only need a single instance of an Enterprise Resource Planning (ERP) application, worldwide, to support customer information entry.

Unfortunately, many organizations have been created via mergers and acquisitions, and the processes performed in specific units reflect the historical origins of the units. Thus, large organizations typically end-up supporting a variety of different ways of performing the same tasks. Most process-focused organizations, as they move from CMMI Level 2 to CMMI Level 3, undertake a major effort to standardize common processes throughout the organization. For some organizations, the establishment of standard business processes becomes a major driver for process change, especially when pursued in conjunction with an effort to standardize on a single instance of ERP throughout the organization (see Figure 8).

Do units that perform similar activities use standard or similar processes? Please indicate your organization's overall level of performance. (Choose one)						
	2005	2007	2009	2011	2013	
Never (0%)	6%	6%	2%	5%	5%	14
Occasionally (1-30%)	47%	46%	46%	39%	51%	150
Frequently (31-60%)	24%	29%	34%	29%	26%	76
Most Times (61-99%)	19%	17%	13%	22%	17%	50
Always (100%)	4%	2%	5%	5%	2%	6
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**296**

Figure 8. Are similar processes throughout the company performed in a similar way?

Once again, we see that most respondents in 2013 said that their organization only Occasionally performs similar tasks in a standard manner. In the particular instance there has been no significant change in the overall pattern over the years. You can see that there seemed to be a slight increase in the number of respondents in 2011 who said that they did it Most Times, but that seeming change has disappeared in 2013.

Are Standard Process Models Defined for Each Major Process?

We asked respondents if they had defined the high-level processes that make up their major value chains. Typically, organizations start defining processes at the departmental level (CMMI Level 2). It's only when process becomes an enterprise concern, at CMMI Level 3, that companies begin to think in terms of value chains, of the major processes that make up each value chain, and of aligning and streamlining the flow of high-level processes across departmental boundaries. It often occurs as part of an enterprise-wide business process architecture initiative (see Figure 9).

Are process models defined for the major value chains in the organization? Please indicate your organization's overall level of performance. (Choose one)						
	2005	2007	2009	2011	2013	
Never (0%)	20%	11%	10%	9%	11%	33
Occasionally (1-30%)	32%	44%	39%	31%	41%	122
Frequently (31-60%)	22%	23%	22%	25%	23%	70
Most Times (61-99%)	20%	17%	24%	24%	19%	58
Always (100%)	6%	5%	5%	10%	5%	16
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**299**

Figure 9. Does the organization have standard process models for each of its value chains?

Are Standard Measures Defined for Each of the Major Processes?

We asked participants if their companies had standard measures defined for evaluating the performance of value chains and major processes and sub-processes. Most companies have a set of KPIs (Key Performance Indicators) that are used to evaluate corporate performance. Too often, however, their performance metrics are not related to specific value chains or business processes but simply assigned to functional units. In these instances, a change in a KPI does not automatically suggest which value chain or process should be examined or which processes need improvement. In a process centric organization the KPIs are specifically designed to measure the performance of business processes (see Figure 10).

Are performance measures defined for evaluating the success of all major processes and sub-processes? Please indicate your organization's overall level of performance. (Choose one)						
	2005	2007	2009	2011	2013	
Never (0%)	20%	11%	10%	10%	14%	43
Occasionally (1-30%)	32%	44%	39%	42%	55%	165
Frequently (31-60%)	22%	23%	22%	24%	17%	51
Most Times (61-99%)	20%	17%	24%	18%	12%	35
Always (100%)	6%	5%	5%	6%	2%	5
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**299**

Figure 10. Does the organization have standard measures to evaluate the performance of major processes?

Figure 10 shows a significant growth in *Occasionally*, but significant loss in both *Frequently* and *Most Times*. Once again, it's as if 2011 hadn't happened, and organizations are now saying they are closer to where they were in 2009 or 2007.

Is Support Provided by Automated Applications Consistent with the Processes?

We asked how well the existing software applications supported the company's processes. In an ideal world, business people would define the best possible processes and then IT would create tailored applications to support those processes. In the real world, processes are constantly changing and applications that are purchased from vendors are difficult to tailor to align with a specific organization's way of working. Thus, in many cases, employees find themselves "fighting" the software applications that are supposed to help them. For example, we have seen many situations where sales or service people try to enter data, find the system won't accept it, and then smile and explain that the system doesn't like the entry, but that they know how to get around the problem, and proceed to enter the data in some other way (see Figure 11).

Is the support provided by automated applications consistent with the defined processes used by the organization? Please indicate your organization's overall level of performance. (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Never (0%)	8%	10%	8%	9%	9%	26
Occasionally (1-30%)	42%	51%	48%	39%	54%	161
Frequently (31-60%)	33%	23%	24%	25%	24%	71
Most Times (61-99%)	14%	14%	18%	20%	12%	35
Always (100%)	3%	2%	3%	6%	2%	6
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**299**

Figure 11. How well does the existing software support processes?

Once again we see that in 2013 the pattern is as it was in 2005 and 2009. Most organizations report that software supports their processes are *Occasionally* aligned. In the long run, this should worry ERP vendors. Many companies have invested in ERP to get modern performance reporting systems. At the same time, most report that the ERP software has forced them to perform tasks in ways that are incompatible with their preferred ways of working. BPMS will increasingly offer companies an alternative – or at least a way to "adjust" their ERP with more flexible process models that can be more easily changed. We estimate that well over a third of the BPMS applications developed to date have been developed as an alternative to, or the make ERP more agile. As BPMS case studies get more publicity, companies will increasingly see BPMS as a solution that gives them both performance data, and strong support for the organization's preferred approach to working.

Are the Skills Needed to Perform the Tasks Defined and Documented?

We asked if respondents' organizations had defined the tasks needed for major processes, and then defined the skills needed for specific jobs to assure that people were being hired or trained to perform the requisite tasks. It's one thing to define the activities that need to be performed. It's another thing to define exactly what knowledge and skills are required to perform the activities.   The latter requires a system of job definitions or job models that are created by practitioners knowledgeable in human performance. It requires that the tasks be carefully analyzed and that the human activities be precisely specified. If the human task is manual, then a step-by-step description of the work is required. If the task is cognitive, then a description of the knowledge and business rules required to make decisions is often required. If the task requires a coordinated decision, then a description of all who must participate in the decision must be provided.

This kind of human performance analysis has been well defined in more operational areas and is usually done precisely in manufacturing jobs. It is harder to do in more complex jobs where more knowledge and greater flexibility is required. Some analysts refer to these more complex jobs as "knowledge work" and propose that new technologies are needed to define human performance requirements in these areas. Examples of knowledge work range from sales activities and customer service through jobs like new product development and software systems development. In these cases, it is easy to specify the broad, high-level activities that need to occur, but hard to define exactly what specific steps need to be followed, as they vary greatly, depending on the specific circumstances the employee faces. Some have argued that these tasks are better conceptualized in terms of rules that constrain actions rather than as step-by-step procedures. In any case, we would expect manufacturing companies to have well-defined employee job descriptions, and we would expect service industries and organizations that involve lots of knowledge processing activities to be less likely to have well-defined job descriptions (see Figure 12).

Are the skills needed to perform the tasks in the major processes defined and documented? Please indicate your organization's overall level of performance. (Choose one)							
	2005		2007		2009	2011	2013	
Never (0%)	8%		9%		5%	8%	12%	36
Occasionally (1-30%)	32%		51%		48%	41%	49%	145
Frequently (31-60%)	30%		22%		23%	26%	24%	72
Most Times (61-99%)	26%		15%		20%	20%	14%	41
Always (100%)	4%		3%		3%	6%	1%	3
Total	**100%**		**100%**		**100%**	**100%**	**100%**	**297**

Figure 12. Do organizations have descriptions of the skills required to perform processes?

In this case there appears to be little progress. In most organizations, the documentation of the skills necessary to perform a task are only occasional documented.

Are Managers Trained to Do Process Redesign and to Manage Processes?

We changed this question in 2007. In 2005 we asked if the company provided training in redesign and project management. In 2007 we asked if managers were trained to do redesign and to manage projects. Thus, it probably isn't fair to compare the results between the two years too closely. From 2007 to 2009 the broad pattern has remained the same.

In either case, there does not seem to be a major shift in company maturity in this area (see Figure 13).

Are managers trained to analyze, design and manage business processes? Please indicate your organization's overall level of performance. (Choose one)							
	2005		2007		2009	2011	2013	
Never (0%)	13%		20%		14%	19%	24%	71
Occasionally (1-30%)	37%		50%		49%	40%	52%	153
Frequently (31-60%)	29%		18%		21%	19%	15%	43
Most Times (61-99%)	16%		11%		13%	15%	5%	16
Always (100%)	5%		1%		3%	7%	4%	13
Total	**100%**		**100%**		**100%**	**100%**	**100%**	**296**

Figure 13. Are managers trained to analyze, redesign or manage processes?

Does Your Organization Have Process Managers Who Are Responsible for Processes?

In 2011 we asked a new question to probe the nature of process management in a bit more depth. We asked what kinds of "process managers" organizations had. We were interested to know whether companies had value chain managers, if they had managers for sub-processes within a division, or if they had managers for even smaller processes. In 2011, we asked them to choose one response and in 2013 we allowed respondents to choose more than one response.

Does your organization have managers who are responsible for processes? (Choose more than one)						
	2005	2007	2009	2011	2013	
Managers resp. for value chains				19%	25%	75
Managers resp. for major processes within divisions				32%	42%	124
Managers. Resp. for Specific processes				27%	44%	130
All managers trained to think as process managers				13%	14%	41
Other				10%	14%	42
Total				**100%**	**100%**	**412**

Figure 14. What are an organization's process managers responsible for?

In 2011, and again in 2013 we were impressed that 25% of the organizations in the survey had value chain managers, and even more impressed that so many organizations had managers within divisions who were responsible for specific processes, major or otherwise.

We have always thought that assigning process managers was the key to becoming a process-centric organization. At the same time, in our experience, it's the hardest thing for companies to commit to. In the abstract, everyone agrees that if your organization is serious about using processes to get results, someone has to be responsible for getting those results. Organizations without process managers too often find that, when something goes wrong, no one is responsible.   On the other hand, organizations are very committed to the departmental management structure that most managers "grew up" with and any change in that approach is usually fiercely resisted.

Unfortunately, understanding the answer to this question is difficult. One way to read it is to imagine managers who are entirely focused on managing a process. A value chain manager, responsible for the entire Retail Sales process, is normally a process manager focused on getting lots of smaller processes to work together. A sales manager may be either a unit manager, reporting to the head of the Sales Department, or a process manager, responsible for fitting a variety of sales activities together into a whole. Often, when one looks at small scale processes – like a regional sales situation – the same manager wears two hats and is both a functional manager, reporting to the head of sales and a process manager, reporting to the value chain manager. Thus, when an organization says that its managers are trained to think as process managers, it's hard to be sure how much of their time is actually devoted to process management activities.

Do Process Managers Use Performance Data to Manage Processes?

Continuing to focus on managers, we asked if the managers at the respondents' organizations used performance data to manage their processes. Implicitly, this assumes that the processes are monitored and that the data is organized in a manner that can support decisions. In most companies this kind of data is more common at the lower levels of the organization and less likely to be available at higher levels. Thus, for example, supervisors usually monitor the performance of workers and can usually point to specific instances where employees succeeded or failed to perform specific activities. The problem becomes more complex as one looks at higher-level managers who, in effect, manage other managers. Higher-level managers can only manage their subordinates using process performance measures if their subordinates are assigned responsibilities for specific processes and know what measures are used to evaluate the success or failure of the process.

In CMMI terms, this question probes the extent to which the company is moving from CMMI Level 3 to Level 4 and is focusing on measuring and managing processes in a systematic manner (see Figure 15).

Do process managers use performance data to manage their processes? Please indicate your organization's overall level of performance. (Choose one)						
	2005	2007	2009	2011	2013	
Never (0%)	16%	16%	14%	13%	13%	37
Occasionally (1-30%)	39%	48%	49%	40%	55%	162
Frequently (31-60%)	26%	21%	21%	24%	21%	63
Most Times (61-99%)	16%	13%	13%	20%	10%	29
Always (100%)	4%	2%	3%	3%	2%	5
Total	**101%**	**100%**	**100%**	**100%**	**100%**	**296**

Figure 15. Do managers use performance data to manager their processes?

Once again we see that the answers in 2013 are more in line with the data from years prior to 2011.

Are Process Improvement Programs in Place to Maintain Processes?

Broadly, there are two approaches of process change – **process redesign** that typically results in a project team undertaking a major effort to fix broken or deficient processes or to generate new, more effective processes, and **continuous process improvement** that incrementally improves existing processes. Redesign usually takes place independent of the existing, on-going process and ultimately replaces it, while continuous improvement usually takes place within the context of the existing process and involves gradual, incremental improvements in the ongoing process. Some would argue that the natural lifecycle of a process involves an initial redesign effort to assure that the process functions as it should in the context of the larger process of which it is a sub-process, followed by continuous process efforts to refine the design and assure that the process continues to be as efficient as possible. Many companies rely on Six Sigma or Lean initiatives to manage continuous process improvement.

Are process improvement programs in place to identify and improve problems and defects? Please indicate your organization's overall level of performance. (Choose one)						
	2005	2007	2009	2011	2013	
Never (0%)	13%	13%	8%	9%	11%	33
Occasionally (1-30%)	33%	44%	53%	39%	50%	149
Frequently (31-60%)	34%	24%	25%	29%	26%	76
Most Times (61-99%)	16%	16%	12%	17%	12%	36
Always (100%)	4%	3%	2%	5%	1%	4
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**298**

Figure 16. Are process improvement programs in place?

We do not assume that everyone who answered this question (see Figure 16) distinguished between **redesign** efforts, which are more extensive, and **process improvement** efforts, which are more narrowly focused. In any case, the responses in 2013 look more like 2009 than 2011. Most organizations are occasionally involved in process improvement.

An Overview of Organization Maturity Today

As we noted when we started to consider this set of questions, we asked these questions in order to get respondents to define the overall maturity of their organizations. We wouldn't want to claim that our series of questions was the equivalent of a comprehensive CMMI audit. On the other hand, we did design this set of questions to test a number of key items that are associated with specific levels in the CMMI model (see Appendix I for a quick overview of the CMMI levels.)

We expected most companies to be CMMI Level 2 companies, and the data for 2005, 2007, 2009 and 2013 suggest that's exactly what they are. We had hoped that all the attention on process in the past 4-5 years had led lots of companies to increase their efforts to become Level 3 companies and we thought we saw signs of that in 2011, but they have disappeared in 2013. Figure 17 shows how respondents answered specific questions in 2013, and it also provides an average – in blue -- to show how all of the companies responded. A quick glance at the average suggests that – to the extent that this approach is accurate -- most companies taking part in the survey are at CMMI Level 2.

	Never	**Occasionally**	**Frequently**	**Most Times**	**Always**
Processes Documented	3%	49%	29%	17%	2%
Standard Processes	5%	51%	26%	17%	2%
Value Chains Modeled	11%	41%	24%	19%	5%
Measures for Major Proc.	14%	55%	17%	12%	2%
Consistent IT Support	9%	54%	24%	12%	2%
Skills Defined	12%	49%	24%	14%	1%
Managers Trained	24%	52%	15%	5%	4%
Managers Use Data	13%	55%	21%	10%	2%
Process Improvement	11%	50%	26%	12%	1%
Average for 2013 Survey	**11.3%**	**50.6%**	**22.8%**	**13.1%**	**2.3%**
Average for 2011 Survey	**10.8%**	**39.0%**	**25.0%**	**18.9%**	**6.0%**
Average for 2009 Survey	**9.7%**	**46.1%**	**23.9%**	**16.5%**	**3.9%**

Figure 17. Questions about the frequency of specific organizational activities that suggest organizational maturity.

Figure 17 shows the average responses for the levels of maturity as defined by our "maturity questions." We show the averages for 2013, 2011 (in red) and 2009 (in black). Once again, the averages show how the response pattern in 2013 is more like the pattern we observed in 2009 than the one we saw in 2011.

BPM Spending

How Much Are Companies Spending on BPM?

We asked each survey participant to estimate how much money his or her organization was spending on business process work. In 2013, as in all past years, more than half the respondents said they were spending less than $500,000. In addition, you can see that there has been an overall decline in how much organizations are spending on BPM. On the other hand, if you want to be optimistic, you can see a slight uptick in spending between 2011 and 2013 with some organizations moving from spending under $500,000 to spending between $500,000 and $999,999. (see Figure 18).

How much would you estimate your organization will have spent on business process analysis, process management, monitoring, redesign and improvement in 2013? Include BPM management, Lean Six Sigma, process automation and overhead staff. DO NOT include outsourcing or ERP software and implementation costs. (Choose one)									
	2005		**2007**		**2009**		**2011**	**2013**	
$0-$500,000	57%		51%		54%		63%	54%	159
$500,000 to $999,999	15%		16%		15%		16%	20%	60
$1 million $5 million	19%		21%		21%		12%	15%	44
$5 million to $10 million	3%		4%		4%		4%	5%	16
Over $10 million	5%		7%		4%		3%	4%	12
Over $50 million			2%		3%		1%	2%	6
Total	**99%**		**100%**		**100%**		**100%**	**100%**	**297**

Figure 18. How much organizations are spending on BPM.

If we analyze this by region, the Europeans have apparently cut back the most and are less likely to be spending more this year, while the recovery seems a little stronger in North America. (In NA, 25% say they are planning to spend between $500,000 to $999,999 and 7% say they are spending over $10 million.) Worldwide, the Financial Industry has always been the most active single industry in BPM, and they are also recovering a bit slower than average. On the other hand, organizations that report that they have a major commitment to BPMS software are spending more. (28% of those who say they are committed to BPMS software are spending between $500,000 and $999,999.)

Response to the Worldwide Financial Downturn

This is a question we asked for the first time in 2009. The responses underscore the old adage that business process work is recession proof: In good times companies spend to get into new businesses and in bad times they still spend on existing processes to save money.

As you can see below, although the broad pattern remains the same, there is a slight uptick in those who responded that they are starting to accelerate again (see Figure 19). As we just reported above, the uptick is larger in North America than in Europe, and larger among those who report they are committed to BPM or to BPMS.

Every company has responded to the worldwide downturn of the last few years. How would you describe your company's response – as far as business process initiatives are concerned? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
We cut back sharply, as a result of the economic downturn, and there's no end in sight			10%	7%	8%	23
We cut back sharply, but now are beginning to become active again			12%	11%	15%	43
We cut back, but have continued BPM efforts			29%	30%	21%	62
We cut back, but are now beginning to accelerate again			7%	7%	11%	34
We didn't cut back our BPM spending			35%	36%	36%	107
Other, please specify			8%	8%	9%	28
Total			**100%**	**100%**	**100%**	**297**

Figure 19. Response to financial downturn.

When we look at projections about what organizations hope to do in 2014, we will also see a slight uptick, suggesting that the recession, at least in North America is coming to an end.

Corporate BPM Activity Today

We asked a number of questions to gain insight into what organizations were doing to improve their business processes. Several questions were asked about process activities that occurred at the Enterprise, Process, or Implementation Levels. These questions rely on a common BPTrends classification. If this classification is unfamiliar, you can review it in Appendix I. In a similar way, in discussing software products being used in support of BPM efforts, we often rely on the categories we defined in the BPTrends Software Tools Classification. The BPTrends Software Tools Classification is also described in Appendix I for readers who might not be familiar with our approach to defining this rather confusing marketplace.

The Overall Focus of Organizations at This Time

We asked this question for the first time in 2009. The choices ranged from department efforts through to enterprise wide process management efforts. As you can see in Figure 20, in 2009 the largest number of respondents was either working to improve a specific departmental process or focused on incrementally improving existing processes. Both are compatible with companies trying to save money. On the other hand, in 2011, more organizations report that they are working on automating processes and on redesigning enterprise wide processes, and there has also been a slight uptick in the number of companies that say they are focused on enterprise-wide process management systems. In 2013 we are back to the 2009 pattern, and the largest number of respondents was focused on improving specific departmental level processes.

One feels that the 2013 respondent are less mature than those who responded in 2011 – they are more likely to be focused at defining and improving departmental processes, and less likely to be thinking about enterprise processes or on automating them.

How would you describe the overall focus of your organization at this time? (Choose one or two)							
	2005	2007	2009	2011	2013		
Focused on improving specific departmental level processes			32%	28%	40%	120	
Focused on automating departmental or enterprise wide processes			23%	31%	20%	61	
Focused on incrementally improving existing processes			32%	33%	33%	100	
Focused on redesigning enterprise wide processes			25%	18%	18%	55	
Focused on defining an enterprise wide process architecture/ measurement system			18%	16%	14%	43	
Focused on defining an enterprise wide process management/ governance system			17%	20%	17%	51	

Figure 20. Overall focus of organization at this time.

Only 3% of the organizations in Europe say that are not focused on processes, while 13% of the organizations in North America say that. Europeans are more likely to be doing enterprise wide process modeling and much more likely to be doing enterprise-wide measurement and process management work. North American organizations are much more likely to be focused on departmental processes.

The Existence and Location of BPM Groups

We asked all respondents if their organizations had a Business Process Management Group (or Center of Excellence) to coordinate, train, and support business process efforts within the organization. We asked those that had a BPM Group to tell us where it was located. It's been our experience that organizations that are serious about enterprise level work – organizations moving from CMMI Level 3 to Level 4 – usually have their BPM Group at the enterprise level, reporting to a corporate level executive or to an executive level committee, like planning or strategy. Organizations that have their business process groups located in IT or Quality Control usually have a more limited perspective on BPM and are focused only on a part of the total BPM picture (see Figure 21).

Does your organization have a group (or center of excellence) responsible for Business Process Management and, if so, where is it located within your organization? (Choose one)						
	2005	2007	2009	2011	2013	
We do not have a formal BPM Group	34%	36%	33%	36%	34%	100
Our BPM Group is at the Executive level	18%	13%	13%	18%	15%	45
Our BPM Group is at the Divisional or Departmental level	20%	18%	18%	16%	17%	50
Our BPM Group is located within IT	14%	16%	16%	15%	17%	49
Our BPM Group is located within HR or Training	0%	1%	2%	1%	1%	2
Our BPM Group is located within Finance	1%	3%	2%	4%	3%	8
Our BPM Group is located within Quality Control	7%	6%	6%	5%	6%	19
Other, Please Specify	8%	7%	11%	6%	8%	24
Total	**102%**	**100%**	**100%**	**100%**	**100%**	**297**

Figure 21. Where the BPM Group is located within the organization.

As you can see by glancing at Figure 21, there really isn't much difference between the responses over time.

This seems odd to us, as many of the process people we talk with seem to be focused on the problems of setting up a new BPM group or Center of Excellence (CoE) than on any other single issue. But the data suggests that the total number of companies with a BPM CoE has not increased significantly.

About a third of the respondents said they do not have a BPM group or CoE. Of those having a BPM group, most report the group is located at the executive level, at the departmental or divisional level, or in IT.

European organizations are less likely to have a BPM group, but more likely, if they have such a group to have it report to an executive or business manager, while North American organizations are more likely to have the group report to an IT executive.

More mature organizations are much more likely to have a BPM group, and much more likely to have it report to an executive or business manager. Those who report that their organizations have made a strategic commitment to BPM are twice as likely to have a BPM group that reports to a senior executive.

Use of BPM Strategy and Planning Consultants

In an effort to gauge the market for BPM consulting we asked a series of questions about how respondents would use outside consultants if they had the money to hire them. In the first question

we asked about the uses they might make of a consultant at the enterprise level. Indirectly, this question asks where companies think they have problems that are beyond existing, internal expertise.

Broadly, in 2013, as in years past, respondents divided their needs relatively equally among strategy, enterprise process architecture, enterprise measurement, and coordinating and managing (see Figure 22).

If your organization could hire outside consultants to help with your BPM strategy and planning, where would you focus their efforts? (Choose all that apply)						
	2005	**2007**	**2009**	**2011**	**2013**	
Defining the relationship between Strategy and Process	43%	47%	40%	43%	45%	128
Developing an Enterprise Process Architecture	39%	45%	36%	39%	41%	117
Developing an Enterprise Performance Measurement system	37%	37%	41%	35%	41%	117
Coordinating and managing your Business Process Management projects and programs	33%	37%	35%	36%	34%	95
Other, Please Specify	11%	11%	13%	10%	10%	29

Figure 22. How respondents would use Consultants at the Enterprise Level.

The Use of Consultants at the Process/Project Level

We also asked respondents to tell us how they would use outside help if they could hire consultants to help them at the process level (see Figure 23). We use this question to focus not on what organizations have the budget to do, but what they desire to do if money were not a constraint.

If your organization could hire outside consultants to help with BPM projects, where would you focus their efforts? (Choose all that apply)						
	2005	**2007**	**2009**	**2011**	**2013**	
Process Manager training	37%	45%	38%	41%	41%	118
Balanced Scorecard	22%	24%	22%	22%	20%	58
Process Redesign projects	35%	43%	41%	35%	36%	104
Using BPM Frameworks (SCOR, ITIL)	28%	24%	23%	19%	16%	45
Six Sigma Process Improvement projects	17%	22%	15%	12%	17%	49
Process Automation projects	30%	32%	28%	33%	27%	79
Process Analysis and Design training	43%	43%	41%	38%	38%	109
Business Process Outsourcing	7%	9%	7%	8%	6%	16
ERP support for BPM	13%	12%	12%	17%	9%	26
Linking Knowledge Management and BPM	28%	35%	27%	24%	22%	63
Culture change and BPM					47%	135
Other, Please Specify	7%	7%	11%	7%	7%	20

Figure 23. The use of Consultants at the Process Level

Once again, our respondents have chosen more or less the same options as in 2011. Perhaps they were a little less likely to use a consultant to help with ERP support, but otherwise 2013 is very close to 2011. As in the past, help with Process Manager training, Process Automation projects, and Process Analysis and Design training were the most popular. This year, we added a new answer,

"Culture change and BPM". As Figure 23 shows, this new most popular answer indicates that organizations are striving to understand the relationship between BPM and culture change.

The Use of Standard, Enterprise-wide Business Process Methodologies

We decided to add this question in 2011 to explore the nature of methodologies that organizations are using. To start off, we simply asked whether the organization used a standard, enterprise-wide methodology or a variety of approaches. Standardization on a process methodology is usually associated with a growing process maturity and a significant commitment to organization-wide work.

Does your organization have a standard, enterprise-wide business process methodology? (Choose one)							
	2005	**2007**	**2009**	**2011**		**2013**	
No, we have many different methodologies				28%		37%	110
No, but we are considering standardizing on a single process methodology				32%		31%	93
Yes, we have an enterprise standard process methodology				40%		32%	95
Total				**100%**		**100%**	**298**

Figure 24. Does your organization have a standard, enterprise-wide BP Methodology?

As you can see, 37% of the respondents report multiple methodologies, 31% report they are considering standardizing and 32% report that they have a standard process methodology. In other words about one-third of the organizations taking part in the survey have committed to some kind of standard process methodology. Europeans are a little more likely to have a standard methodology, but not by much. Similarly, more mature organizations are slightly more likely to have a standard methodology.

Dominant Process Methodologies

We added this question about methodology in 2011. We asked respondents to characterize their organization's dominant BPM methodology. Respondents were asked to choose only one of three possibilities, because we wanted to know if respondents thought their dominant process methodology was a top-down, bottom-up, or a methodology focused on process automation. This three part distinction seems to best describe today's process methodology market, although there are some methodologies that attempt to cross the lines and include techniques from other areas.

Broadly, **top-down methodologies** begin by asking what the organization ought to be doing. This usually includes a description of products, value chains, and customers' needs. Having defined goals, a top-down methodology proceeds to work down to find out what elements support goals or where the worst problems lie.
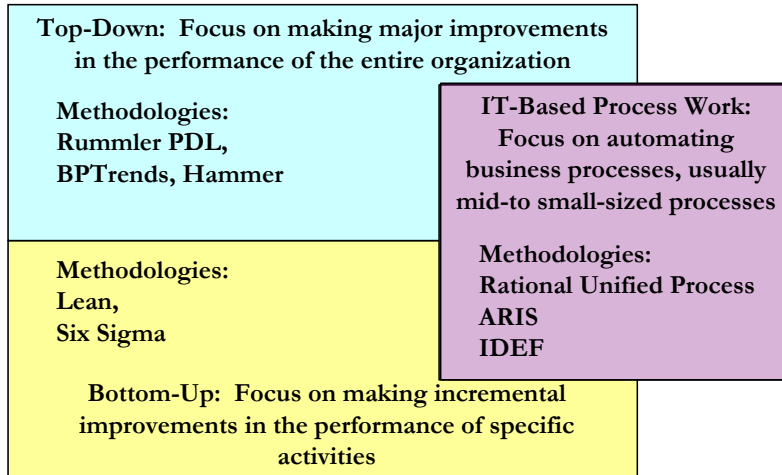
Figure 25. Types of business process methodologies.

Bottom-up methodologies begin by identifying specific problems and then setting out to improve specific processes. This approach is often combined with incremental improvement and in some cases with employee teams that are responsible for incrementally improving processes.

IT-based methodologies focus on automating business processes.

Any one of these approaches can be combined with others. Lean is a good example: Most think of it as a bottom-up, incremental approach, but it also incorporates a top-down approach - enterprise-wide modeling.

How would you characterize your organization's dominant process methodology? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
A top-down methodology focused on major process change				24%	23%	69
An incremental methodology focused on continuous process improvement				48%	48%	144
A software methodology focused on process automation				22%	19%	56
Other, please specify				6%	10%	29
Total				**100%**	**100%**	**298**

Figure 26. Characterize your organization's dominant process methodology.

As you can see by glancing at Figure 26, the results in 2013 are almost the same as in 2011. Almost half the organizations report having an incremental methodology and being focused on continuous process improvement. This could be a proprietary approach, but it most likely means either Six Sigma or Lean.

We checked to see if more mature organizations tended toward a specific approach to process methodology and didn't find any significant difference.

Process Methodologies Used Today

In another new question about methodology we added in 2011, we asked respondents to indicate which of several popular process methodologies they used. They could choose more than one, so this question asks about any and all process methodologies the organization uses.

Ignoring proprietary methodologies that do not publish information about their approach, and in keeping with the fact that most organizations report using their own methodology and an

incremental approach to process improvement, the leading methodologies that respondents said they were using are Lean, Six Sigma, and Lean Six Sigma[1]. A quick glance at the number of Lean and Six Sigma books sold, compared with BPM books sold, suggest that there is a much larger market for Lean and Six Sigma books. Even when an approach is slowly declining, if it starts from a large base, it remains the most popular approach for quite a while. Obviously respondents in 2013 were more likely to be using Lean or Lean Six Sigma.

The BPTrends Associates (BPTA) methodology, like Rummler (PDL) and Hammer methodologies, is a top-down approach that begins with an overview and then drills down. We checked the overlap between the BPTA, Rummler, and Hammer approaches, and there isn't much. Thus, if you add those respondents who say they used any of these top-down approaches, you arrive at 26% of respondents. In other words, in this survey, about the same percentage of respondents picked a top-down approach as picked Six Sigma.

Do you use any of these process methodologies? (You may choose more than one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Lean				27%	34%	97
Six Sigma				22%	23%	65
Combined Lean Six Sigma				26%	36%	101
Rational (or similar IT-based methodology with process elements)				11%	9%	25
Business Rule Methodology				14%	13%	37
BPTrends Associates Methodology				10%	14%	40
Rummler/PDL Methodology				5%	6%	18
Hammer Methodology				8%	6%	17
Framework Methodology (SCOR, eTOM)				12%	12%	33
Consulting Company Methodology (CSC's Catalysis)				5%	4%	12
CMMI Methodology				16%	15%	43
Our organization has its own methodology				43%	45%	126
Other, please specify				11%	9%	26

Figure 27. Some specific methodologies used by organizations.

We are impressed with the fact that, in spite of thinking of our site as a BPM-oriented website, we have a significant number of members who come from the Lean and Six Sigma tradition, and fewer who come from an IT orientation.

Process Standards

Anyone who deals with commodity items is helped by standards. Imagine if every hardware vendor created a unique type of screw head and you had to buy a different screwdriver to deal with the screws on each different piece of hardware you acquired.

Any company that has used a new software product and then, subsequently, decided to switch to another product and found that everything had to be redone - since there was no way to move data

---

[1] Note that some Lean practitioners object to having Lean grouped with Six Sigma while Six Sigma practitioners are inclined to group the two approaches.

from one tool to the other - would have preferred that vendors conformed to common data representation standard. The problem in an emerging market, however, is that everyone needs to agree on what's important and how best to represent things before anyone is ready to define a standard. It's that way, at the moment, with business processes. Every user would like common data representation and software standards, but most users are still trying to determine what standards they want or need. Meantime, different vendors are promoting their own standards, hoping that others will rally round and agree to their standard.

Some process areas have remained remarkably free of formal standards. There are no formal standards in the Six Sigma area[2], for example. A Black Belt means different things to different groups, and everyone seems to get along with this lack of precision.

Software vendors, however, need more precision, and there have been a number of standardization efforts launched to spell out process-related software standards. Most are still in committee. We asked companies what standards they were using, involved with, or interested in, and we suggested a wide range of options. We added some new standards in 2013 to capture items that companies have referred to in past surveys under "Other" to make the list more comprehensive.

This year we changed the question a bit. We dropped a couple of standards that are no longer of any concern (Sarbanes-Oxley) and added a new OMG standard and several bodies of knowledge offered by professional groups.

Which of the following process standards is your organization interested in adopting? (Choose as many as apply)						
	2005	2007	2009	2011	2013	
ARIS EPC (Notation)				14%	22%	64
ISO 9000	49%	40%	36%	39%	30%	88
IDEF (Notation)				5%	7%	21
CMM/CMMI	28%	28%	30%	17%	18%	51
BPEL	23%	26%	20%	12%	10%	28
XPDL		6%	6%	5%	2%	7
BPMN (Notation)	22%	41%	51%	60%	60%	174
UML (Notation)	33%	30%	24%	14%	18%	52
OMG Business Process Metamodel	10%	7%	7%	5%	3%	9
OMG Business Rules Metamodel	4%	4%	6%	4%	4%	12
OMG Decision Management Model					5%	13
OMG Business Process Maturity Model		10%	14%	5%	6%	17
OMG Model Driven Architecture (MDA)		8%	7%	4%	3%	9
ABPMP Body of Knowledge					10%	28
IIBA Body of Knowledge					18%	51
ASQ Lean Six Sigma Body of Knowledge					25%	74
Other, Please Specify	21%	23%	19%	15%	17%	50

Figure 28. Standards companies are using.

---

[2] We might say that the ASQ provides a Six Sigma standard, but few Six Sigma vendors would agree.

The most impressive pattern shown in Figure 28 is the growing importance of the OMG's Business Process Management Notation (BPMN) which continues to dominate the process standards space. Other OMG standards have attracted little interest from process people, but BPMN is important to more than half our respondents. Interestingly, BPEL, a standard approach for moving from a process description to code, has lost support since 2007. Other OMG standards, like their maturity model (BPMM) or their Business Process Metamodel, have failed to attract much interest.

We suggest the lack of more interest in BPEL is a result of the fact that BPMS software tools have become a moving target and that most companies haven't adopted them, or are using them for different purposes. Meantime, BPEL was slow to offer a comprehensive solution and few vendors have fully implemented it. More important, BPMN, in its Version 2.0, has adopted a rigorous syntax and semantics, so that the notation itself serves as a language and doesn't need BPEL to generate code. For whatever reason, interest in the standard has declined in recent years.

We were impressed that 10% of our respondents thought the ABPMP's BoK was an important standard, that 18% of the respondents support IIBA, while 25% consider ASQ's Lean Six Sigma BoK an important standard. In effect, bodies of knowledge with certification exams have emerged as a new type of standard companies can support.

BPM Products and Services Currently Being Used

We asked respondents to tell us what business process products and services were currently being used at their organizations, and we have summarized their responses in Figure 29 . In this case we asked companies what they were actually doing, as opposed to what they might like to do if they had some additional money to spend on consultants.

What BPM products and services is your organization currently using? (Choose all that apply)						
	2005	**2007**	**2009**	**2011**	**2013**	
Graphics Modeling tool (Visio, PowerPoint)	77%	74%	70%	71%	69%	204
Repository based Modeling tool (ProVision, MEGA, Casewise)	38%	32%	40%	27%	36%	107
BPM Suite that can manage the runtime execution of a business process	23%	24%	26%	37%	24%	71
Tool for managing a Rule-based process or application	17%	19%	18%	20%	12%	35
Process Monitoring/BI tool that can feed information to an executive dashboard	18%	24%	26%	24%	13%	39
Training in Process Strategy, Architecture or Performance	17%	16%	18%	13%	14%	42
Training in Process Analysis and Design	33%	31%	34%	30%	32%	94
Training in Process Redesign and Improvement methodology	24%	24%	28%	20%	24%	72
Training in BPM Systems	15%	14%	18%	20%	13%	40
Attendance at BPM Conferences	31%	35%	35%	27%	28%	84
Other, Please Specify	7%	10%	7%	9%	8%	24

Figure 29. Process products and services currently used by companies.

As you can see, in 2013 respondents answered more as they had in 2009 than in 2011, although there are some exceptions. 2013 respondents are less likely to attend a BPM conference and significantly less likely to be dealing with monitoring or BI tools.

For a while it seemed as if companies were moving away from the simpler graphic modeling tools, like Visio, and toward repository tools like ProVision and Casewise. In 2011 it looked like there was a significant uptick in interest in BPMS, but that doesn't show up this year. Instead, in this, as so many other areas, 2013 is more like 2009 than 2011.

Which Tools Are Most Valuable?

In 2007 we shifted from simply asking what business process tools were being used, to asking which specific business process tool was most valuable to each organization. In 2005, respondents could choose multiple responses, thus the number totaled more than 100%.

As in other items, 2013 looks more like 2009 than 2011.

Which of the following software tools have been most important to your business process management efforts in 2013? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Organizational Modeling environment	12%	5%	4%	4%	4%	11
Graphics tool (Visio, PowerPoint)	42%	31%	27%	29%	34%	99
Process Modeling tool (Casewise, IBM Modeler, ProVision)	39%	24%	27%	17%	20%	59
Business Rules tool	10%	2%	2%	3%	3%	9
Repository	13%	4%	6%	4%	7%	21
BPMS Suite or execution environment (Workflow, EAI)	20%	13%	16%	28%	13%	38
Simulation tool	11%	3%	3%	2%	1%	3
BAM/Real-Time Process Monitoring tool	7%	1%	2%	3%	2%	6
Performance Metrics tool/system	16%	8%	7%	3%	5%	15
Other, Please Specify	7%	8%	5%	7%	12%	34
Total	**177%**	**100%**	**100%**	**100%**	**100%**	**295**

Figure 30. Which software tools are most valuable.

The BPMS Market

In previous years we asked respondents to tell us which specific BPMS products they used. In 2013 we omitted this question. In each of the earlier years at least one vendor had encouraged lots of its users to take the survey to boost the numbers for their product. We developed various ways to eliminate this type of bias, but finally decided it was easier not to tempt the vendors. Frankly, the market for the larger BPMS tools has settled down and the leading vendors' market share is probably not going to change in the foreseeable future. At the same time the many new vendors have only a little market share and the response to our survey is insufficient to give a good reading as to which are most popular. (Most get from 2-4 responses.) So, if you are interested in the major players in the BPMS market, we suggest you go to www.bptrends.com and search for and read our article on "The BPMS Market", which was posted on July 30, 2013.

The Use of BPMS Applications

This was a new question in 2011 which we added to learn more about why BPMS tools are being used. Notice here (see Figure 31) that the number of respondents who said they have only done 1 or a few BPMS applications to explore the technology is up from 12% in 2011 to 24% in 2013. Similarly, note the drops in other areas, especially in response to business people using BPMS and to BPMS being used to replace ERP.

If you organization is developing applications using a BPMS product, indicate why you are using it. (Check all that apply)							
	2005	2007	2009	2011	2013		
We have only done 1 or a few apps to explore the technology				12%	24%	51	
IT is using BPMS as a better way to develop software				31%	23%	50	
Business people are using BPMS to develop apps				17%	5%	10	
We use BPMS to define our business processes				46%	33%	70	
We use BPMS to make our ERP applications more agile				22%	11%	23	
We use BPMS to monitor existing processes				32%	18%	39	
Our BPMS applications to automate complete processes				34%	18%	39	
Our BPMS applications to support employees in performing processes				33%	18%	39	
We use BPMS to adopt our business processes to our work culture					9%	20	
Other, please specify				13%	19%	40	

Figure 31. How organizations are using BPMS software products.

What Business Process Initiatives Are Underway Today

To determine what kinds of business process efforts companies are currently engaged in, we asked respondents to choose from a wide variety of BPM initiatives. In 2011, as in 2009, the largest number of respondents said their organizations were working on the development of an enterprise process architecture. This year Major Process Redesign projects has edged Architecture out (see Figure 32).

In both cases they suggest that around a third of the organizations are committed to either process architecture work, or to a major process redesign project.

What business process initiatives are underway in your organization this year (2013)? (Check all that apply)						
	2005	2007	2009	2011	2013	
Development of an Enterprise Process Architecture	42%	43%	37%	38%	31%	86
Development of an Enterprise Process Performance Measurement system	25%	25%	24%	24%	20%	57
Coordinating Enterprise Process Change efforts	27%	31%	33%	26%	26%	73
Coordinating Enterprise Process Management efforts	25%	29%	28%	26%	22%	62
Process Manager training	19%	22%	24%	24%	20%	57
Balanced Scorecard	25%	22%	14%	22%	14%	40
Major Process Redesign projects	38%	36%	36%	31%	33%	91
Redesign projects with Frameworks (SCOR, ITIL)	13%	12%	13%	8%	9%	24
Six Sigma Process Improvement projects	21%	25%	21%	18%	22%	62
Major Process Automation projects	26%	27%	23%	27%	20%	57
Process Analysis and Redesign training (Non-Six Sigma)	26%	20%	22%	19%	24%	66
Lean Six Sigma Process Modeling and Redesign Training	15%	22%	17%	18%	19%	52
Other, please specify	11%	7%	9%	7%	9%	24

Figure 32. Activities in which companies were engaged in 2013.

SOA and Cloud Computing

This is another question that we added in 2009. We asked respondents to describe how important SOA and Cloud Computing were to their business process efforts. Note that we did not ask whether or not companies were using SOA or Cloud Computing, but focused only on whether or not they were using these technologies in conjunction with their process work.

In spite of all the vendors' promotional efforts, we assumed that most companies weren't ready to use SOA or Cloud Computing in conjunction with their process projects. These same companies might be using SOA or Cloud Computing for some other purpose, however, but we are only focused on companies that are using these new technologies in conjunction with process efforts.

As you can see in Figure 33, the largest number of respondents (36%) is not too concerned about SOA or Cloud Computing. Fifty-Seven percent are either not interested or just beginning to explore SOA or Cloud Computing. Only 2% are using Big Data in conjunction with BPM and only 1% are using Case Management or iBPM in conjunction with BPM. This is not to suggest that these initiatives are not important, or that they won't grow dynamically in years ahead, but it is to say that, as yet, these are initiatives that are being explored, but not yet integral to the process work companies are currently doing.

BPM practitioners have been overwhelmed with the new terms and technologies introduced in the last decade. Initially, BPMS tools were XML based tools that included modeling, EAI, and Workflow. No sooner did most process practitioners begin to master these terms than BPMS was expanded to include Business Rules, and then Data Mining and Business Intelligence. Within the past 3 years, the BPMS tool set has expanded to include SOA, and within the past 2 years the vendors have begun to promote Cloud Computing. When you consider that most companies are still trying to model their core processes, this onslaught of technologies, one after another, has been a bit overwhelming and we aren't surprised that most companies are uninterested in trying to master the

newest additions to the BPMS mix. In fact, it's surprising that as many companies have embraced SOA, given how new it is.

The vendors are talking quite a bit about BPM and SOA, and even more recently about BPM and Cloud Computing, iBPM (or Case Management) or BPM and Big Data. How important is this to your organization? (Choose one)	2005	2007	2009	2011	2013	
We are doing process work and are not too concerned about SOA or Cloud Computing			32%	28%	36%	100
We are beginning to explore SOA or Cloud Computing			23%	26%	21%	58
We are using SOA in conjunction with some of our BPM projects			15%	16%	9%	24
We are using Cloud Computing in conjunction with some of our BPM projects			4%	11%	5%	13
We are using Big Data in conjunction with some of our BPM projects					2%	5
We are using Case Management (iBPM) in conjunction with some of our BPM projects					1%	3
SOA is very important to us			15%	10%	8%	21
Cloud Computing is very important to us			5%	5%	9%	25
Big Data is very important to us					4%	12
iBPM or Case Management is very important to us					2%	5
Other, please specify			7%	4%	5%	13
Total			**100%**	**100%**	**100%**	**279**

Figure 33. Process work and SOA or cloud computing.

The Biggest Challenge while seeking to Gain Widespread Acceptance for Business Process Efforts at Your Organization

We added a question to the 2009 survey to inquire about obstacles to wider acceptance of business processes within organizations. We were actually surprised at the responses to this question. Although we have had people remark on the confusion generated by competing process efforts fighting for attention, we did not expect it to emerge as the leading obstacle to gaining process acceptance. The answers in 2013 were very similar to those in 2009 and 2011. We were not surprised that 48% of the respondents said that senior management wasn't interested or was distracted. Given the economic downturn, senior executives can be excused for being focused on external events and on finances and the economy.

Moreover, we suspect that the downturn had something to do with the fact that many management teams were calling for action to reduce costs and that several different groups – from Six Sigma to Process Redesign, to IT were suddenly offering solutions. But that nearly half our respondents highlighted the problem of competing process change initiatives strongly underscores what should be the major Business Process Management message – that processes are an asset and should be managed or at least coordinated by a single entity (see Figure 34).

There are only a few organizations that have gone so far as to establish a Chief Process Officer, but many have established Business Process Management Centers of Excellence (BPM CoE) and many more are talking about BPM and putting a major emphasis on the centralized management of the organization's process initiatives. If the lack of such central coordination is really the major problem

that half our respondents' organizations face, then we can expect that centralization is going to become a growing issue in the near future.

What obstacle or challenge do you face as you try to gain widespread acceptance of business process efforts at your organization? (Choose one or more)						
	2005	2007	2009	2011	2013	
Senior management isn't interested or is focused elsewhere			38%	37%	48%	133
Management wants ROI estimates that we cannot produce			27%	23%	29%	80
We have multiple process change efforts competing for attention			49%	42%	49%	136
We have had process projects that failed and management is cautious			12%	12%	16%	45
Management does not want to make the investment at this time			23%	22%	24%	65
Other, please specify			15%	10%	10%	28

Figure 34. Challenges to widespread acceptance of process efforts.

Doing ROI on small projects is usually easy, so the fact that 29% say they have trouble with ROI suggests that they are concerned with larger process projects. Process redesign projects that introduce new technology are always hard to cost accurately, since the organization isn't sure exactly what it will cost to get the technology implemented. Harder, however, are process management projects, like an effort to establish a business architecture or a BPM CoE. Clearly, neither of these management initiatives generates any profit in its own right. One doesn't create a process architecture to make money; one creates it to provide tools and data one can use to improve process management. It's very like creating an accounting system. The accounting system doesn't create value, but it's a necessary tool required to manage the finances of the company. Senior management of a startup would never argue about the costs for developing an accounting system because they know it is required. Executives often argue about the costs of process architecture work because they don't realize that they need an accurate description of all their processes as part of an ongoing effort to gather good data on how processes are performing. Thus, in a real sense, selling the idea of enterprise process work is tightly integrated with how well senior executives understand and value processes.

Plans for the Future

BPM Products and Services Being Considered for the Coming Year

Earlier, we asked what products and services respondents were currently using. In this section we report on questions designed to determine what respondents plan to do in the future. In Figure 35 for example, we asked what products or services their organizations were likely to purchase in the coming year.

What BPM products and services is your organization planning on purchasing during the remainder of 2013 or in 2014? (Choose all that apply)						
	2005	2007	2009	2011	2013	
Graphics Modeling tool (Visio, PowerPoint)	20%	15%	16%	17%	18%	46
Repository based Modeling tool (MEGA, IBM Modeler, ProVision)	23%	23%	21%	19%	19%	49
BPM Suite that can manage the runtime execution of a business process	11%	25%	21%	29%	12%	30
Tool for managing a Rule-based process or application	26%	15%	15%	15%	10%	26
Process Monitoring/BI tool that can feed information to an executive dashboard	15%	23%	22%	17%	13%	33
Training in Process Strategy, Architecture or Performance	22%	22%	19%	22%	16%	41
Training in Process Analysis and Design	21%	29%	22%	25%	25%	63
Training in Process Redesign and Improvement Methodology	27%	23%	19%	21%	22%	55
Training in BPM Systems	16%	22%	21%	22%	16%	39
Attendance at BPM Conferences	33%	40%	36%	25%	28%	70
Other, Please Specify	13%	13%	18%	15%	17%	43

Figure 35. Products and services companies are considering acquiring in 2014.

As in other areas, the jump in those interested in BPM Suites disappeared in 2013, while the answers to other questions seem in line with 2007 and 2009.

As the recession ends and organizations spend more money, there should be an overall increase in the acquisition of BPM-related services. The nature of the acquisitions, however, will reflect past priorities: Training and to a lesser degree, attendance at conferences. The data also suggests that the sale of BPMS products will decline a bit.

Recall that few respondents said they were interested in case management (iPBM), and this seems to be what many BPMS vendors are emphasizing. Not satisfied with current sales, they are promoting what may well become the next BPMS market, but in the meantime – in 2014 – it doesn't look like there is much demand for that approach.

Methodology and Respondents

Methodology

BPTrends conducted this survey during September and the first half of October of 2013. Four earlier surveys, with similar questions, were conducted in the spring of 2005 and in the fall of 2007, 2009 and 2011. In all cases we sent an email to our membership inviting them to participate and posted a pointer on the BPTrends website to encourage participation from both members and site visitors. Figure 36 reports the number of respondents for each of the Surveys.

Survey	Respondents
2013	309
2011	399
2009	264
2007	274
2005	348

Figure 36. Number of Respondents for each Survey.

In all these cases we had additional responses from people who looked at the survey and answered only a few questions. We have ignored these partially completed responses and report only on the responses of those who completed the entire questionnaire. Even then, the total responses to each specific question vary because some respondents answered every question while others skipped questions that didn't apply to their organizations.

This year, we are using tables that show the percentages of past surveys, and only including the actual number of responses as well as the percentages for 2013. This makes it much easier to compare the responses from all five surveys, but keeps the tables from becoming too complex. We hope you find this useful. We comment on statistical significance of the number of respondents to this report because we are concerned about the number of BPM Survey Reports that make broad generalizations based on 25 or 35 respondents. It's very hard to believe that a total of 30 respondents accurately reflects the general market for BPM. We believe our sample is about the minimum needed to reach any broad conclusions, although we caution readers to keep in mind that even these conclusions are probably slightly skewed, since they represent the responses of managers and practitioners who are interested enough in business processes to be readers or visitors to the BPTrends website. We are reasonably happy with the response sets we got from Europe and North and South America and believe that the conclusions we reached represent valid generalizations about these geographical markets.

We avoid comparing response sets from Australia, the Middle East, Asia, or Africa. Although we received more responses from those regions than in the past, we still received fewer than 50 responses from any one of those areas. Thus, we are not confident that our sample adequately represents the typical position of business process managers and practitioners from those regions. We mention considerations like these in the report in hopes that our readers will increasingly demand a higher standard from other analyst groups that make much out of data sets that cannot support the statistical conclusions or the comparisons their authors make.

Since the absolute numbers of respondents differ slightly in the surveys, we believe it is best to focus on the percentages. Some questions, however, depend on earlier questions. Thus, in some cases we ask all respondents who have previously said they were using BPMS software to tell us how they are using the software. In this case, the total sample can easily be much lower than the total number

responding to most questions, and the actual numbers can help readers check the sample size for any specific question.

As we look at the questions and answers, we do two different checks.

- First, we ask how the complete 2013 responses compare with the response patterns of previous years. Is the market's overall response to the question different this year from past years, and if so, what trend seems to be present?

- Second, we check to see how the complete 2013 responses compare with responses of selected subsets of the responses. For example, we check to see if respondents from North America answer differently from the whole, or if respondents in North America answer differently from respondents in Europe.

As readers, what you need to know is that we have examined all questions from both perspectives. We have compared this year's results with the results from previous surveys. We have also checked the following filtered results in each case:

- We compared the whole with responses from North American, European, and South American responses. We didn't have enough responses from other geographical areas to justify comparisons in those cases.

- We have compared all responses with responses from individuals who say they are business people, process practitioners, business analysts, business or process architects and IT consultants.

- We have checked responses from those reporting on their entire organization and those who report they are reporting on a division or a single business unit or function.

- We checked responses from those from large companies, medium sized companies, and small companies to see if any differ significantly from the whole set of responses.

- We have checked responses from individuals who say they work for Computers/Consumer Electronics/Software industries, from Financial Services/Insurance, from Government/Military, and from Professional/Business Services/Consulting to see if individuals from those industry groups vary significantly from the whole.

If we don't comment on a difference, you may assume that there were no significant differences in the response patterns. Whenever we found a significant difference using any of the filters we list above, we note it.

Also, whenever we ask a question that allows respondents to select "Other", we always check the nature of the "Other" responses. In most cases, even where there are quite a few of them, they don't form a pattern, but simply refer to unique or unusual terms for what is being discussed. Whenever there is a pattern, however, we report it.

The major methodological issue that this year's survey raises is the discrepancy between what seemed like a developing trend in last year's survey that has disappeared this year. In essence, in earlier surveys there was a noted lack of much development. In 2005, 2007 and 2009 respondents were consistent in saying that their organizations were Occasionally doing things, leading us to suspect that most organizations were at CMM Level 2 as far as process maturity was concerned. Similarly, while some organizations were interested in BPMS products, there seemed to be no rush on the part of most organizations to adopt this new technology – something very typical of Moore's Early Adopter Phase of technology change. In 2011, it seemed as if organizations were showing signs of being a little more mature and of being a little more interested in BPMS. This year, that change has disappeared and the pattern in 2013 looks as it did in 2005, 2007 and 2011.

The best we can suggest is that we had nearly 400 respondents in 2011, while before, and in 2013 we had only about 300. Apparently the increased number of respondents represents a slightly different population than those who have been responding to the BPTrends survey in earlier years and who responded in 2013. It serves to remind us all that this is not a random survey, but a survey of those who read BPTrends. This same logic applies to all of the surveys you see on business process change. A few magazines, like the Economist, may be in a position to undertake a random survey of business managers, in a manner similar to political polls, where individuals are phoned at random, but that is a very expensive way to work and no one we know who works in the business process area can afford that kind of approach. Besides, random calls couldn't get an audience who knew enough about the specifics of business process work to answer the types of questions we ask. Thus, we are left with what we have. This is a survey of readers of BPTrends, who know quite a bit about how their companies handle business process work. If, however, we were to survey an audience made up primarily of Lean practitioners, or one mostly of those focused on automation, we would get different answers. Thus the importance of the information that follows that describes who our respondents were.

Job Title or Function

Each respondent was asked to describe his or her job or function within his or her organization. In the data pictured in Figure 37 we show how the respondents answered this question in each of the surveys.

Over the past five years a growing majority of our respondents identified themselves as Business Practitioners or Business Analysts. In 2011, to gain a little more information, we subdivided that category and asked respondents to choose among some new, more specific possibilities (see Figure 37).

Which of the following best describes your job function? (Choose one)	2005	2007	2009	2011	2013	
Executive (CEO,COO,CFO)	17%	12%	11%	14%	9%	26
Business or Line of Business Manager	18%	17%	15%	11%	15%	42
Process Practitioner/Business Analyst	50%	55%	63%			
Process Practitioner				9%	12%	33
Lean/Six Sigma Practitioner				11%	3%	9
Business Analyst				2%	14%	40
Business/Process Architect				14%	18%	50
IT Manager/IT Developer	14%	15%	10%	8%		
IT Manager					6%	17
IT Developer					0%	0
HR Manager or Human Performance Practitioner	1%	1%	1%	1%		
HR Manager					0%	1
Human Performance Practitioner					0%	1
BPM Instructor/Student				1%		
BPM Instructor					0%	1
BPM Student					0%	1
BPM Consultant				20%	13%	36
Vendor Representative				1%	0%	0
Other, please specify				7%	10%	29
Total	**100%**	**100%**	**100%**	**100%**	**91%**	**286**

Figure 37. Respondent's job title or function.

The biggest obvious difference is that in 2011, we had more Lean Six Sigma Practitioners and this year we had more business analysts.

The Scope of the Respondents' Coverage

We asked respondents to tell us if they would be describing their entire organization, or simply a division or business unit within a larger organization. The large majorities of respondents, from all the surveys, indicated that they would be reporting on their entire organization. These results correspond with the fact that so many respondents were executives or line managers. It may also reflect the fact that a growing number of organizations are interested in enterprise-wide process issues and are more aware of how processes are being managed throughout their entire organization.

This pattern is consistent across all the subgroups we examined. Respondents from large companies are just as likely to indicate they were describing their entire organization as respondents from small companies, for example (see Figure 38).

Which of the following best characterizes the organization you are describing? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Entire Enterprise	64%	69%	77%	71%	76%	213
Division	23%	19%	14%	17%	14%	39
Single Business or Functional Unit	13%	12%	8%	12%	10%	28
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**280**

Figure 38. The business unit the respondent is describing.

The Size of the Organizations Being Described

We asked each respondent to indicate the overall size of the organization he or she would be describing.

2013 is more like 2009, but even then there are interesting differences. Respondents are more likely to be from large or small companies and significantly less likely to be from mid-sized companies. Some of the difference in the results may be due to the fact that this year we actually defined the size of Small, Medium and Large. What one may consider a large company, another may consider to be a small or medium sized company. This year's data should be more consistent than in previous years.

Which of the following best describes your organization's size? (Choose one)						
	2005	**2007**	**2009**	**2011**	**2013**	
Large (2000 or more employees)	41%	46%	47%	35%	53%	151
Medium (500 to 1999 employees)	33%	34%	34%	38%	15%	44
Small (under 500 employees)	26%	20%	19%	27%	32%	91
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**286**

Figure 39. The size of the respondent's organization.

Industries Represented in the Survey

We asked respondents to identify the industry in which they worked. In 2009, as in all past surveys, the largest number of respondents came from the financial services sector. Only 17% of the total respondents came from Finance, however, assuring that the survey represents a broad cross section of service and manufacturing companies and government agencies. Over two thirds of the respondents came from four sectors – Financial Services/Insurance, Professional/Business Services/Consulting, Computers/Consumer Electronics/Software, and Government/Military. There was a slight drop in the number of respondents from Computers/Software and Finance/Insurance and a slight increase in Government/Military, but the overall pattern and range of organizations taking part in the survey has remained largely the same over the years. Respondents from Finance and Government Agencies were much more likely to report that they were from large organizations. Those from Computing and Consulting were slightly more likely to be from small and mid-sized companies (see Figure 40).

Which of the following best describes your industry? (Choose one)						
	2005	2007	2009	2011	2013	
Aerospace/Defense	2%	3%	2%	1%	4%	10
Heavy manufacturing	2%	2%	3%	1%	4%	10
Light manufacturing	2%	2%	1%	2%	2%	6
Chemicals/Energy	5%	3%	2%	5%	5%	13
Computers/Consumer Electronics/Software	17%	14%	10%	3%	5%	13
Building/Construction					2%	5
Education	4%	4%	5%	4%	3%	9
Financial Services/Insurance	19%	20%	17%	13%	22%	63
Food/Beverage	2%	1%	3%	4%	2%	5
Government/Military	9%	10%	12%	9%	7%	20
Healthcare/Medical Equipment	2%	2%	5%	3%	4%	10
Leisure/Entertainment/Travel	1%	1%	1%	1%	0%	1
Professional/Business Services/Consulting	16%	14%	16%	19%	18%	52
Retail and Wholesale	4%	3%	2%	4%	4%	10
Telecommunications	8%	3%	5%	5%	6%	17
Utilities	4%	5%	5%	3%	4%	10
Other, Please Specify	9%	13%	13%	10%	11%	32
Total	**106%**	**100%**	**100%**	**100%**	**100%**	**115**

Figure 40. The range of industries represented in the survey.

The Geographical Locations of the Respondents' Companies

We also asked respondents to tell us where their organizations were located. In all four years the largest group of respondents was from North America though they accounted for a smaller share in the last two years.

Where is your organization located? (Choose one)						
	2005	2007	2009	2011	2013	
North America	45%	42%	42%	27%	40%	115
Europe	29%	30%	32%	38%	35%	100
South America	6%	5%	7%	16%	7%	20
Australia/New Zealand		12%	12%	11%	11%	31
India and SE Asia		3%	3%	2%	1%	3
NE Asia (China, Japan, Korea)		1%	2%	4%	1%	2
Subtotal Asia/Australia	*13%*	*16%*	*17%*	*14%*	13%	36
Africa/Middle East	7%	7%	3%	4%	5%	14
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**285**

Figure 41. Where respondents' organizations are located.

The correlation of Location to BPM Maturity suggests that Europe and North America are relatively the same in terms of their BPM maturity. The other regions of the world did not generate enough responses to draw reliable conclusions.

Participation in Previous Surveys

In 2009 we asked a few new questions to highlight things we didn't focus on in past surveys. One question simply asked if participants had taken this survey in the past. Due to the number of Surveys that have been done, this question is getting more and more complex. The question requested that one answer be chosen, but the survey questions were set up to allow multiple questions. This confusion may have skewed the results. What can be said is that 142 respondents were first time participants. That means that 167 (54%) of the participants have responded to one or more previous surveys.

Please indicate which of the previous BPTrends General Surveys you have participated in? (Choose one)						
	2005	2007	2009	2011	2013	
None			72%	71%	50%	142
The 2005 survey			1%	3%	1%	4
The 2007 survey			19%		3%	9
The 2009 survey				19%	8%	23
The 2011 survey					20%	56
Yes, I participated in all previous surveys			8%	6%		
One or more of the earlier surveys but don't remember the years					30%	84
Total			**100%**	**100%**	**112%**[3]	**318**[3]

Figure 42. Participants who took survey in the past.

Comments on Respondents

We have already suggested that we are impressed by both the size of the sample – the number of individuals who responded – and the distribution of the sample among market sectors, geographical locations, and size of organizations. These all suggest that the data is representative of the broad scope of BPM today.

We do want to suggest several qualifications readers should consider in reviewing the data.

First, the audience self-selected themselves for this survey. Most found out about the survey because they came to the BPTrends website, or were, at least, reading something about business process and saw information about the survey. Thus, we cannot assume that the responses represent the opinions of the average business executive. They represent the opinions of business people who are concerned with the role or importance of business process and who are members and/or readers of BPTrends.

Second, we did not ask each respondent to identify his or her company. We did this to assure the privacy of the respondents. Thus, we don't know how many respondents come from the same company. We have generally assumed that each respondent represents a different company. Thus, if 20% of the respondents said their companies used Business Process Modeling tools, we have assumed that 20% of the companies used those tools. This assumption is reasonable, even if a few of the respondents do come from the same company, but readers should be aware that we are ultimately reporting on the responses of individuals, and not responses from different companies.

---

[3] Some chose more than one answer despite the instructions. The survey tool did configure this question properly.

Third, a large number of respondents were from Computers/Consumer Electronics/Software and Professional/Business Services/Consulting. Many of these respondents are probably consultants and software vendors who are not actually doing BPM work themselves, but are supporting organizations doing BPM. We cross-referenced these responses and discovered that they are very similar to those of obvious end users, like those from Finance or Manufacturing. Where it does seem to skew the data a bit is in the number of Executives included in the survey. Of the 56 respondents from Computers and Software in 2005, for example, 16 were Executives. Of the 52 respondents from Professional and Consulting, 20 were Executives. Of the 63 respondents from Financial Services and Insurance, only 7 were Executives. Only 2 of the 13 respondents from manufacturing identified themselves as Executives.

Something similar happens when you consider the relationship between company size and job titles. Most of the executives come from small companies. And most of the professional and consulting companies are small companies. Thus, readers shouldn't focus too much on the number of Executives taking part in the survey, as they probably represent executives from consulting companies and software vendors and not executives from end user companies. On the other hand, the Business Line Managers are mostly from larger companies and are more broadly representative of the entire range of industries involved in the survey.

We use filters that allow us to examine how a particular subgroup of respondents answers the questions to determine whether or not there is any bias being introduced by respondents from specific groups. When we think the answers to a given question might be skewed by a typical response by a particular subgroup of respondents, we make note of it.

Appendix I

Concepts Used in the Report

We have assumed most readers are familiar with the terms and concepts widely used on the Business Process Trends website. For readers who might not be familiar with these terms or concepts, we briefly describe them below. In this report we have relied on four different sets of related terms or concepts:

- **BPTrends Levels.** The BPTrends Pyramid provides a way of defining the various levels of BPM activity within an organization and the types of activities associated with each level.

- **CMMI or Process Maturity Levels.** CMMI defines five levels of process maturity. Organizations at Level 1 do not support processes in any significant way and are immature. Level 5 organizations are completely mature and have mastered the use of processes.

- **BPTrends Process Software Tools Classification**. This classification describes the terms we use to describe the various types of BPM software products and the relationships among them.

- **Geoffrey Moore's Technology Lifecycle Model**. This popular model describes how new technologies evolve. We refer to this model in order to provide insight into the maturity of the BPM market as a whole and to describe the maturity of some of the more specific niches we discuss in this report.

We consider each in sufficient detail to allow readers to understand how the terms are used in this report.

The BPTrends Pyramid

The BPTrends Pyramid describes three groups of business process activities that occur at different levels within an organization.
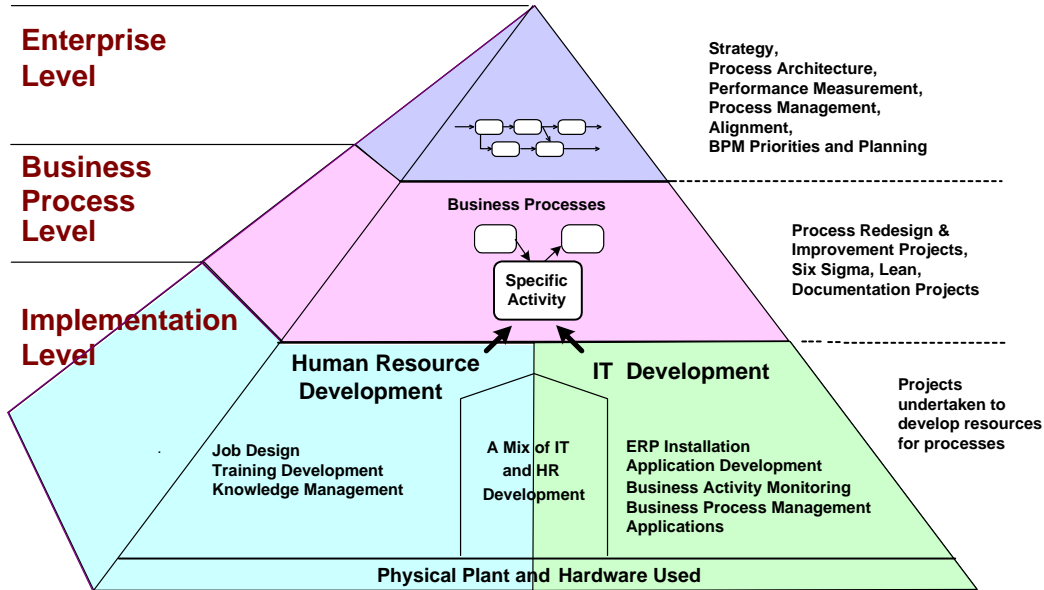

Figure 54. The BPTrends Pyramid and levels of corporate BP activity

The Enterprise Level

Enterprise Level activities occur at higher levels in the organization and are independent of any specific day-to-day processes. Enterprise Level activities focus on aligning strategy and processes, on defining an enterprise-wide business process architecture, on defining enterprise performance measures, and on aligning them with value chains and high-level processes. Other enterprise level activities involve the establishment of a process management system and on developing ways of surveying all of the organization's process needs and establishing priorities and plans to assure that processes are changed and maintained.

The Process Level

Process Level activities are organized into projects. Typical process level projects include efforts to document processes (ISO 9000), projects to create new processes or to redesign existing processes, or projects to improve existing processes (Lean, Six Sigma). Typical process analysis, design, and modeling activities all occur at this level.

The Implementation Level

The Implementation Level provides the resources needed to implement process change projects. In essence, a redesign team, operating at the Process Level, may specify that a given process should be redesigned to incorporate the use of a new software application. Thus, at least one, and probably several, new projects are initiated to develop or acquire and tailor the new software application, to train employees in the use of the new software application, and so forth. Projects undertaken to provide support resources for process change efforts occur at the Implementation Level. There are specific tools, notations, and methodologies that are, generally speaking, only used at the Implementation Level – for example, a software development methodology like RUP or a notation like UML.

CMMI Maturity Levels

The concept of Process Maturity Levels was developed at the Software Engineering Institute (SEI) at Carnegie Mellon University in the Nineties, based on quality work originally undertaken by Watts Humphrey. Originally developed to support the analysis of software process maturity (CMM), the latest version, the Capability Maturity Model Integrated (CMMI) has been generalized so that it can be applied to any of a wide variety of processes in diverse organizations. (See Figure 55.)
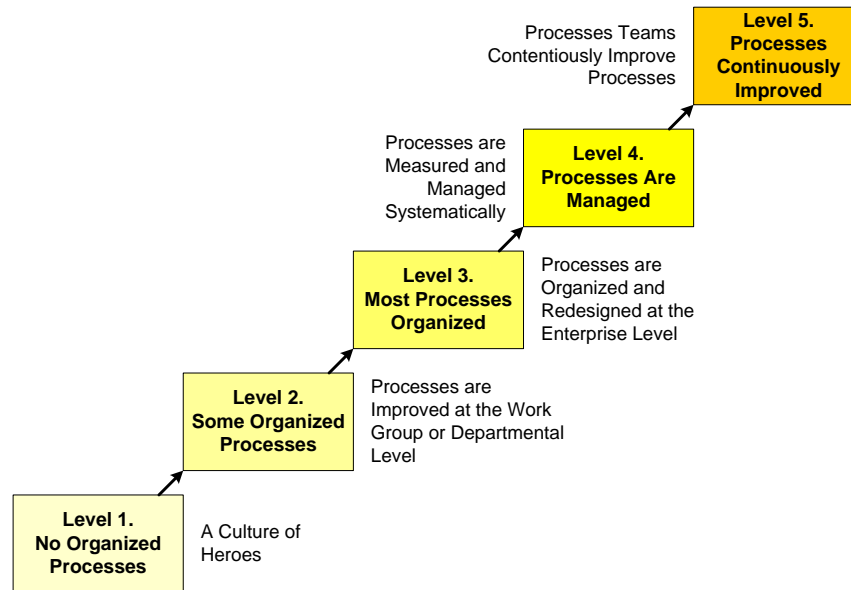

Figure 55. An Overview of the basic CMMI maturity levels

Software organizations often pay SEI certified evaluators to do a formal evaluation to determine where their organizations are on the CMMI scale. Many other companies do informal evaluations, based on the broad concepts inherent in the CMMI "stair step diagram." What follows is an informal description of the CMMI process maturity model.

Level 1. No Organized Processes

Level 1 organizations don't rely on processes. Things get done according to plans made on the fly. CMMI folks often refer to them as organizations based on heroes. Things get done because someone makes a heroic effort and gets the report out at the last minute. If someone asks how long something will take, or what resources will be needed, those answering the question are just making a guess – they don't have a systematic procedure or the data needed to provide accurate answers to these questions.

Level 2. Some Organized Processes

When organizations first begin to embrace processes, they begin by trying to define their core or most commonly used processes. At this stage, they don't conceptualize the entire company as a set of processes, all interrelated, but focus only on a specific process as it functions within some more or less arbitrary set of boundaries. Level 2 organizations have several of their major processes defined.

Level 3. Most Processes Organized

Level 3 organizations have most of their processes defined. They not only have models of their core business processes but also understand how management and support processes work to support those processes. Most Level 3 organizations have a process architecture that shows how all of the

organizations in the company function. Thus, if there is a problem, it's easy to quickly identify the processes that could be causing the problem and the implications for any suggested change.

Level 4. Processes Are Managed

Level 4 organizations have gone well beyond simply defining all their processes. These organizations have process managers who gather data on process performance and customer satisfaction and use this data to make decisions about how to optimize the processes they manage.

Level 5. Processes Are Continuously Improved

Level 5 organizations have built processes right into the essence of the organization. They know their processes and manage their processes. Moreover, they have systems in place to constantly improve their processes whenever possible.

Most organizations are not, of course, exactly at one level or another. Studies have suggested that most organizations in the US are somewhere between Level 2 and Level 3, trying to expand the processes they have modeled and understand into a complete process architecture. Similarly, a smaller group of companies are between Levels 3 and 4. They are working to establish process management and measurement systems throughout the company.

In large organizations, it is common to find that one division or group will be at a different level of maturity than other groups or divisions within the same organization.

Types of Business Process Software Tools

We have assumed that most of the respondents to our survey have been reading BPTrends and know how we classify business process software tools. We have used our classification system, which is described in Figure 56, to identify types of tools and to suggest some of the ways the various tools or techniques overlap with each other. For those who may be unfamiliar with our classification system, we have described the major types of business process software tools.
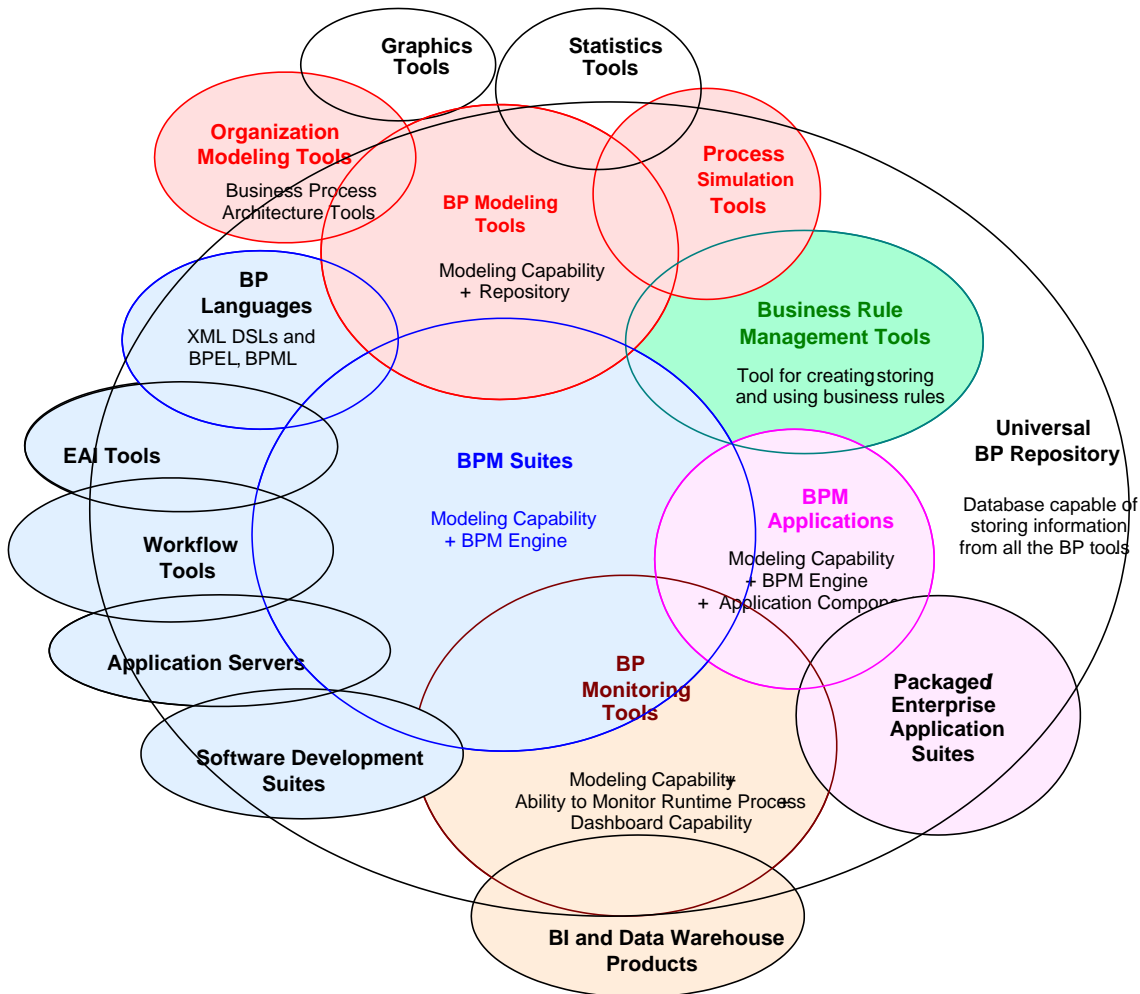

Figure 56. Major types of software tools used by business process practitioners

Simple Graphics Tools

A significant portion of the companies seeking to describe or document business processes use either Word or graphics tools like Visio or PowerPoint. The advantage these tools offer is simplicity and familiarity. Most business managers already have them and are familiar with their use. The disadvantage of these products is that they are not designed to create a database or repository that can save and accumulate information about business processes. Thus, they tend to be used on isolated business process projects. It is nearly impossible to maintain business process documentation in these tools, and, thus, redesigns done using these products tend to be useless for subsequent redesign projects or for the development of an enterprise process architecture.

Business Process Modeling Tools (BP Modeling Tools)

Business Process Modeling tools are designed not only to define and document business processes, but also to store information about the processes so that they can be easily updated and maintained. Companies that move beyond isolated process change efforts and decide to define enterprise-wide process architectures almost always shift to one of these tools. They are more difficult to learn but the benefits they provide far outweigh the effort required.

Organization Modeling Tools

Many of the BP Modeling tools include features that allow users to create modeling of their organization. In essence, these models are very high-level views of how the organization interacts with its environment, what value chains and major business processes it supports, and how high-level processes are aligned with various types of enterprise resources. Many of the BP Modeling tools include these capabilities and some tools specialize in Organization Modeling.

Business Process Simulation Tools

Most BP Modeling tools include simulation capabilities. In addition, there are some tools that are especially designed for more demanding simulation work. Most BP Modeling teams turn to specialists to undertake simulation studies, and those specialists often prefer the more sophisticated Simulation Tools.

Business Process Management Suites or Systems (BPMS Tools)

These tools combine process modeling with runtime execution. In essence, they combine features previously found in workflow and EAI (Enterprise Application Integration) products. In some cases the tools also incorporate Rule Management and Process Monitoring capabilities. These tools are newer and are just beginning to gain a foothold in most companies. In the long run, they promise to help companies create a process layer between those who define and manage processes and the software resources used to implement processes.

BPM Applications

In essence, BPM Suites are tools that one uses to create BPM applications. A BPM Application is an application that is used to manage all of the people and software systems used to implement a specific process. Whenever the organization is called upon to execute a specific process, it relies on the BPM Application to manage the execution. In a few years, as BPMS becomes more widely used, we expect to see BPM Applications offered with BPMS built in. Conversely, we expect ERP and CRM vendors to offer BPM Applications especially designed to integrate with their current ERP or CRM modules. A BPMS is only a tool for building a BPM Application. A BPM Application is an application designed to execute a specific process with BPMS built in to enable managers to modify the application as needed.

Business Process Monitoring Tools

Most BPMS tools offer some process monitoring capabilities. They tend, for example, to provide information about process events to the process supervisors. Other BPMS tools, and more sophisticated monitoring tools, combine data from specific processes with information derived from other sources in a Data Warehouse and then use simulation techniques or Business Intelligence (BI or Data Mining) techniques to extract patterns from the data and to report information to executives via Executive Dashboards in something close to real-time. These tools are sometimes called Business Activity Monitoring (BAM) tools.

Rule Management Tools

Most BP Modeling tools allow analysts to identify and save business rules. Most BPMS tools incorporate rule management tools that at least allow for the identification of business rules used in

specific business processes. In some cases the Rule Management tools can be used to actually analyze business rules at runtime and generate or suggest decisions using logical inferencing techniques.

BPTrends has published extensive reports on Business Process Modeling and Simulation Tools, on BPM Suites, and on Business Rule Tools. These reports are available free of charge on www.bptrends.com

Geoffrey Moore's Technology Lifecycle Model

Geoffrey Moore is a high tech marketing guru who has been involved in numerous technology launches. He wrote a very popular book, *Crossing the Chasm* (Harper Business, 1991), which describes the lifecycle of new technologies and the problems they face gaining widespread acceptance.

Innovators

New technologies, according to Moore, are initially adopted by Innovators - companies that are focused on new technologies and are willing to work hard to make a new technology work in order to gain an early advantage. Innovators have their own teams of sophisticated technologists and are willing to work with academics and vendors to create highly tailored solutions.

Early Adopters

Once the Innovators prove that a new technology can be made to work, Early Adopters follow. Early Adopters are not focused on new technologies, as such, but on new business approaches that can give them a competitive advantage. They are less technologically sophisticated than Innovators, but still willing to work hard to make a new technology perform, if they see a clear business advantage. (See Figure 57.)
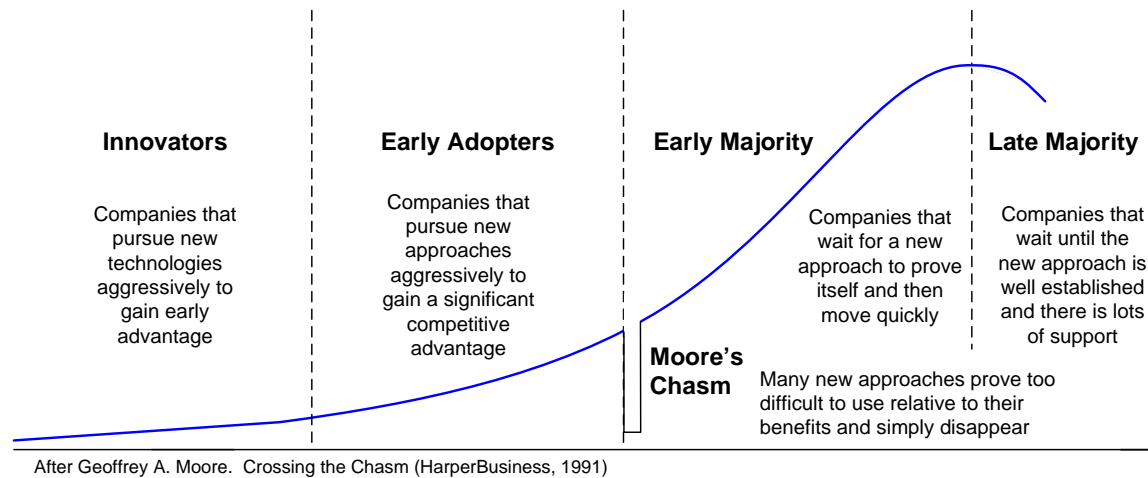

Innovators	Early Adopters	Early Majority	Late Majority
Companies that pursue new technologies aggressively to gain early advantage	Companies that pursue new approaches aggressively to gain a significant competitive advantage	Companies that wait for a new approach to prove itself and then move quickly	Companies that wait until the new approach is well established and there is lots of support

Moore's Chasm — Many new approaches prove too difficult to use relative to their benefits and simply disappear

After Geoffrey A. Moore. Crossing the Chasm (HarperBusiness, 1991)

Figure 57. Moore's technology adoption life cycle curve

The Early Majority

The market for a new technology doesn't really get hot until the Early Majority are convinced to adopt the technology. The Early Majority represent some 35% of the market. They won't adopt new technology until they consider it well-proven. In fact, they aren't interested in technology at all, and don't have a lot of sophisticated technologists who are willing to struggle with the technology. They wait for case studies to show that the technology really provides the benefits that are claimed. And they insist on products that make it easy for less sophisticated developers to deploy the technology quickly and without significant difficulties.

Moore's Chasm

Moore's Chasm looms between Early Adopters and the Early Majority. Lots of technological innovations that are tried by Early Adopters fail to gain sufficient acceptance to pass the criteria of the Early Majority. The new technology gets lots of publicity, for awhile. Conferences are launched to provide information about the technology and it is described in glowing articles in all the high-tech magazines and business publications that are always touting the next new thing. Ultimately, however,

the technology fails to produce enough concrete proof of usability and benefits to convince the Early Majority to make an investment, and the technology drops out of sight.

The Late Majority and the Laggards

The Late Majority, like the Laggards who lie even further to the right, are reluctant to spend money or take chances on new approaches. They wait until their competitors among the Early Majority have started gaining benefits from the technology, and then follow suit, reluctantly.

When you go to conferences and hear vendors talking about the technological features of their product and why it's better technology than whatever came before, you are in an Innovator's Market. When the market begins to transition to Early Adopters, you begin to hear more business cases and get information on specific benefits. This is also the time when vendors begin to worry about wider acceptance, and become concerned with standards, user interfaces, and assuring their products can work with legacy applications. If the technology is really successful and crosses the chasm, the technology conferences tend to drop away, and the vendors begin to show up at traditional business shows and promote their products as a cost-effective way to solve a class of business problems. The majority don't care about technology. They just want to solve business problems quickly and effectively and to stay ahead or at least even with their competitors.

When a new technology is first introduced, many relatively small vendors rush to offer products. As long as the market is small, ironically, the number of vendors is large. No one vendor makes very much money, but they are full of hopes, each believing that their technological approach is superior. As the market grows and customers become a little more sophisticated, they begin to demand more comprehensive products and features like support for evolving standards. It is not uncommon for products to go through 3-4 generations in the course of 2-3 years. The cost of constantly developing new versions of one's product, coupled with the need for more aggressive advertising, forces the smaller vendors to search for capital to continue to remain competitive.

Sometime during the Early Adopter phase of the market, the major vendors begin to incorporate the technology into their more comprehensive offerings, and begin to promote the technology. In effect, the large vendors guarantee that the new technology is safe. As the competition heats up, most of the small vendors disappear. Some are acquired by large vendors. Many decide to specialize in industry or niche specific markets. Others simply fail to earn enough money to survive. The key thing, however, is that Majority companies only buy from established vendors who they are reasonably confident can provide the rather extensive support they will require and who they are sure will still be in business 5 or 10 years from now. Thus, if a new technology succeeds in crossing Moore's chasm, the leading vendors will be companies like IBM, Microsoft, and SAP. One or two of the new startups may have been successful enough to have grown into a 100 million dollar company and still be viable in the Majority market, but most won't make it.

Moore's Model and BPM Market

Unfortunately, it is not easy to apply Moore's model to the BPM market, as a whole, because today's BPM market is really lots of separate markets. The most important distinction is between those engaged in helping companies improve their business processes and those working to provide software tools that will enable some kind of process automation. Even within these segments, however, there are important distinctions, as for example, between the process modeling software tools that have been widely adopted, and the BPMS tools that are still in the Early Adaptor phase.