Planning for 2015: How to Embrace the Six C's of Business Process Management

Executive Summary

The first decade of the 21st century has been a momentous one, characterized by political upheaval, a communication revolution spawned by smartphones, and a global economy which lurched from boom to recession and remains entrenched in turmoil. The one common thread through these disparate events is the increasing rate of change. (See sidebar below.)

As we move deeper into the second decade, the only certainty is that this rate of change will continuously increase. Sadly, those businesses which don't proactively adapt will be left behind

This fast-changing environment has been replicated in the business process management (BPM) world over the past decade. What at the start of the century was a niche technology, – used in relatively few organizations – is now seen as a leading technology platform, at the heart of many enterprise-wide initiatives.

As the famous Chinese philosopher Lao Tzu once wrote: "Those who have knowledge don't predict. Those who predict, don't have knowledge."

Nevertheless, to help organizations stay ahead of the curve, this white paper identifies key trends which will define BPM in 2015 and beyond. We have labeled these trends as the 6 C's – Cloud, Collaboration, Contextual, Coverage, Continuous Improvement and Codeless. We then lay out an approach that the business and IT sides of the house can follow to successfully adapt their investment plans and deployment of key BPM technologies.

Examples of the lengths of time taken for media platforms to penetrate mass consciousness.

Radio	TV	Internet	Facebook
38 years to reach **50 million** listeners	**13 years** to reach **50 million** users	**4 years** to reach **50 million** people	less than **9 months** to reach **100 million** users

Cognizant

The Evolution of BPM Software Suites

Business Process Management can be defined as a systematic approach for making an organization's business processes much more effective, efficient and adaptable to a continuously changing business environment by reducing processing time, human error and miscommunication. As a pure management practice, BPM has been around for decades helping organizations improve how they optimize key operational activities. It is only during the past 10 to 15 years that the discipline has evolved into a distinct industry with the emergence of software suites, or BPMS, which function as underlying technology platforms that enable/orchestrate business processes.

To better understand where we see BPM moving by the year 2015, it's important to look back on how the market evolved, and how these developments may influence the way forward.

1990 – 2000: Origins

Unlike many technology spaces, BPM platforms have inorganically arisen as solution providers have redeveloped and repositioned products to meet organizations' ever-increasing expectations of how technology can be deployed to more effectively manage various aspects of how they operate. The three main origins of tools in the BPM software space are:

- **Workflow Automation:** Used for largely standalone, isolated processes (such as approval flows for purchasing orders).
- **Enterprise Application Integration (EAI):** Functions as middleware to enable integration of systems and applications across the enterprise.
- **Enterprise Content Management (ECM):** Encompasses tools used to capture, manage, store, preserve and deliver contents and documents through their lifecycle.

During this first decade, the BPM software suite market was highly fragmented, featuring products with disparate strengths. The BPM software classification scheme cited above provided a loose-fitting umbrella.

2001 – 2005: Increased Pace of Change

During the first half of the previous decade, BPM software, regardless of origin, began to converge. As the market began to mature, these product suites added key components, now seen as essential to a BPM platform, such as business rules engines, process-modeling platforms, process monitoring, governance and optimization tools.

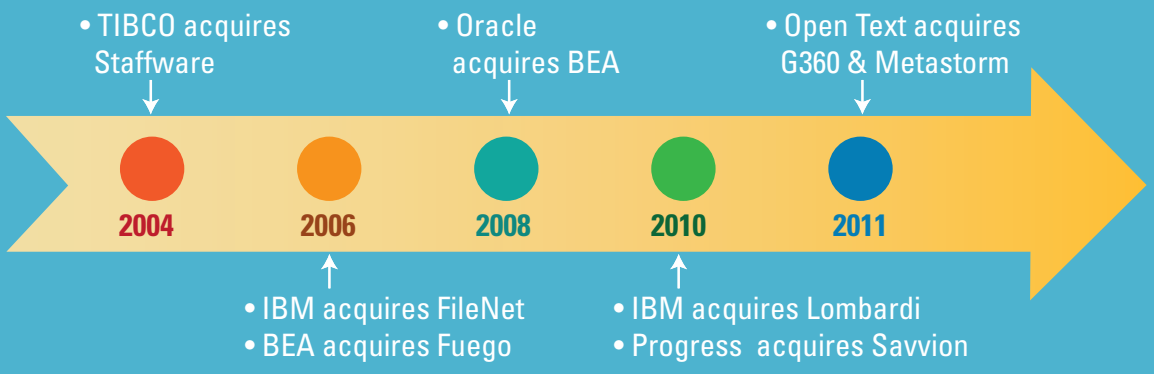
2006 – 2011: BPMS Convergence and Expansion

Over the past five years, the segment has consolidated significantly, with numerous enterprise players unfurling solutions that combine BPM with rules management, portals, document management, service-oriented architecture and business intelligence. The most significant convergence can be seen in the BPM + Business Intelligence (BI) area, which offers a new way for

Mergers and Acquisitions

The rising demand for BPM solutions emerged amid a wave of mergers and acquisitions within the enterprise software business. The BPM market was initially dominated by niche players, but started attracting the notice of large enterprise players. As a result the BPM space saw rapid consolidation, declining from nearly 150 vendors in 2006 to just 25 in 2011.

The diagram below conveys the major acquisitions that occurred in the last decade.



organizations to enhance customer focus and preferences. With each emerging technology trend, a new, expanded BPM ecosystem has appeared. This convergence and expansion is ongoing; it's a trend we believe will continue to define the BPM suite of the future.

BPM 2015: The Six C's

BPM and services-oriented architecture tools which were estimated to account for $1.8 billion in licenses, maintenance, and services fees in 2008 are expected to reach $6.2 billion by 2015, according to WinterGreen Research Inc.[1] With such steady growth expected in the segment's trajectory, a key question emerged concerning the evolution of the BPM market. As we peered into our crystal balls, some inescapable trends presented themselves which in our view will recast the way BPM tools are seen and used by 2015. Conveniently, these trends can be grouped together under what we call the Six C's of BPM (see Figure 1).

Cloud

Cloud BPM should emerge as a mainstream capability by 2015. By leveraging cloud computing (private, public or hybrid models), organizations will be able to deliver quality business processes at a much lower cost. How so? By providing the capability to host a BPM solution on a cloud platform. Since capital expenditures for dedicated hardware are eliminated, organizations can save money by paying only for the BPM software services they consume on a monthly basis. The pay-per-use model is accounted for as operational rather than capital expenditure and hence can be flexed if the business conditions or BPM usage changes in the future.

Because of their distributed infrastructure, cloud BPM platforms also mitigate risk (i.e., if an outage occurs, BPM service delivery can be shifted to a redundant server). It also provides the capability to scale up quickly. This is especially critical for BPM applications whose focus is on phased delivery of capability to an expanding set of user groups. (E.g., if more user groups are added to a BPM application in subsequent phases, then the infrastructure will need to scale up in parallel, and fast!)

As BPM license prices are on the rise (and expected to increase further by 2015), organizations will not want to spend additional capital replacing their existing IT infrastructure to upgrade to the latest version of their BPM software. Rather, they will expect a hassle-free and cost-effective way of procuring solutions. Driven by cost-cutting motivations, BPM providers will increasingly turn to business process as a service (BPaaS) solutions. Though the oft-cited concerns of data privacy still exist, cloud services are expected to see traction in industries such as, but not limited

The Six C's and Emerging Ecosystem of BPM

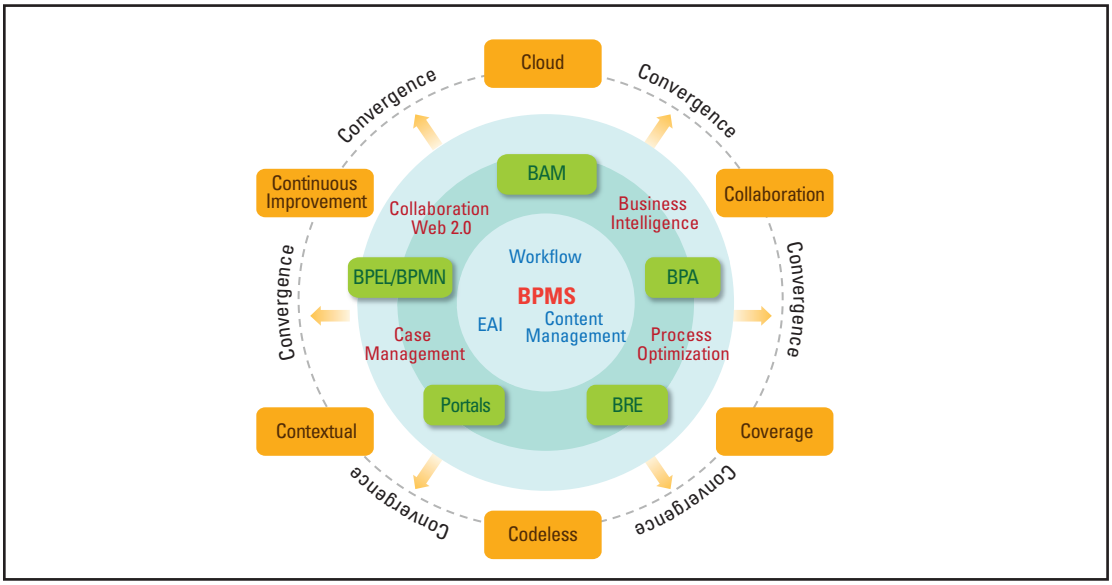


Figure 1

to, healthcare and financial services, according to industry pundits. When an industry such as financial services, which has prime data security concerns, is expected to move to the cloud, it can be very well understood that other industries are sure to follow.

According to Michael Porter, a leading authority in the field of competitive strategy, an organization should achieve competitive advantage by cost leadership, differentiation or market segmentation. When it comes to IT infrastructure and applications, an organization should examine low cost/high security options. With cost reduction and ease of setup of cutting-edge functionalities (with minimal upgrade cost) as the prime benefits, off-premise cloud-based deployment options for BPM will grow in number by 2015. Hence, we predict that by 2015 many organizations will embrace cloud to achieve competitive advantage by reducing costs for infrastructure, upgrading and operations.

Collaboration

End-User Collaboration

There has been a notable rise in organizations leveraging virtual teams, as they seek to utilize the best talent regardless of location. There have been two main drivers for the emergence of distributed teams, a trend that will accelerate as we approach 2015:

- **Globalization:** Organizations are spreading their nets further in order to attract the best talent. Despite the ongoing global financial crisis and subsequent fears of a double-dip recession, economic growth continues in Asia-Pacific, a geography where talent is abundant and less expensive, relative to Europe and North America.
- **Telecommuting:** With more and more employees looking for greater freedom in where they choose to work, organizations have enabled employees to work more virtually and with a variety of devices beyond the standard issue PC or laptop. By 2015, there is expected to be a significant increase in number of people working from home, as we can see home-based businesses and corporate home office households emerging as a trend in work culture.

What does this mean for BPM? By 2015, processes will increasingly involve team members in distributed locations; as a result, there will be a need to have collaboration tools to facilitate communication. For instance, in the insurance space, if a claims adjuster needs a claim to be reviewed by a senior colleague, she could wander over to her desk and get the query clarified. By 2015, it is increasingly likely that this senior colleague could be halfway across the world or sitting in a home office across town or the globe. Therefore, organizations in insurance and beyond will need collaboration tools, built seamlessly into key business processes to facilitate discussion and decision-making. In the case of an insurance claim where a request needs to be referred to a senior colleague, in-parallel, video-conferencing facilities could be activated from within the BPM software platform to enable a real-time, "face-to-face" discussion.

Development Collaboration

Collaboration will also be a critical element in the building of BPM applications. As the global service delivery model gains popularity, this will mean that BPM tools should be co-joined with collaboration platforms to allow subject matter experts, business analysts, architects and developers to work together to simplify and accelerate the BPM configuration process. With the help of collaboration capabilities, each of the aforementioned stakeholders can simultaneously contribute to and review the requirements, design and implementation. Thereby, the development collaboration ensures that every stakeholder is on the same page, which can reduce cycle time in requirements or design clarifications.

Contextual

Optimized decision-making is a critical part of most business processes. For instance, when a customer is being on-boarded, pricing is crucial to determining profitability. Price too high, and you risk losing the customer to the competition; too low, and the customer is unprofitable. Conventional wisdom has dictated that such decisions are too important to be taken by systems; but over the years, certain routine decision-making has been "systemized" by isolating the variables and logic involved, and coding the same as part of BPM engagements. Despite this, many key decisions in organizations continue to be taken by individuals, and in an age where process transparency and consistency is all-important, this leaves the door open to disappointment.

As many organizations shift from being product-centric to more customer-focused, they require solutions that are more decision-centric. The prime feature of a decision-centric solution will be the ability to delight the customer by controlling the quality of decisions made at each customer interaction by taking into consideration his or

her most likely behavior. This is accomplished by leveraging the transactional and business data present in the organization's database to build necessary context. Going back to the pricing example, the system can determine a price based not only on the pre-configured rules, but also on the up-to-date information available on existing customers with similar profiles and behavior.

In an era where technology is synonymous with intelligence, this trend could be one of the key differentiating factors among leading organizations by 2015. We expect the following benefits to emerge:

- **Personalized Customer Service:** Contextual decision-making by introducing more variables and historical context provides the ability to provide personalized customer service to the mass market.
- **Value-based Customer Service:** Contextual decision-making enables differentiation by providing the ability to leverage customer feedback, which has been captured, so that the system can offer the next decision accordingly.
- **Improved Customer Satisfaction:** This is due to reduced processing complexity and faster service.
- **Empowered Business Users:** The features can be quickly configured and managed by business users without having to rely on technical support.
- **Efficient Cross-Sell:** Provides contextually relevant cross-sell and up-sell options.

Coverage

Coverage Across Industries

In the initial days of BPM, early adopters were primarily the banks that were interested in how new technology could help them automate exception processes that had been handled manually. Seeing the early success in cost savings and productivity improvement, these customers were emboldened to try and automate bigger and more complex processes. At the same time, organizations in other industries such as insurance and healthcare became interested in seeing whether they could replicate the success experienced by banks. As a result of cross-industry experimentation, we predict that by 2015 BPM adoption will increase in the manufacturing and retailing sectors as these companies use BPM software suites to achieve business value by filling the gaps in their ERP and SCM solutions.

Coverage Within Industries

The best way to examine BPM penetration within a particular industry is to focus on the BPM frameworks vendors have released to specific market segments. While initially these frameworks focused on generic industry or cross-industry scenarios, the newer tools are becoming more complex and application-specific. For example, though BPM software-based banking industry frameworks were available in the past, they were not designed to cater to specific functions such as anti-money-laundering (AML) or risk management – which the newer frameworks are attempting to do. This trend towards in-depth industry frameworks will enable solution offerings to address needs within exceedingly specific functions in an industry.

What does this mean for BPM? By 2015, as innovative organizations look to provide specialized offerings to their customers, the demand for plug-and-play solutions will increase. Industry frameworks that take into account specific business and technology standards will take compliance to the next level with the focus shifting to increased depth of industry frameworks. As shorter time to market becomes more critical in the extremely competitive global economy, many organizations will need in-depth frameworks that need a minimal amount of custom code and maximize requirement coverage, thereby accelerating solution introduction to the market.

Continuous Improvement

Process improvement efforts have always been in the wish list of every organization. However, by 2015 we expect the BPM suites to dive deeply into features that support process improvement efforts.

When we consider the concept of continuous process improvements, lean Six Sigma (LSS) and BPM should be seen as complementary contributors. Unfortunately, BPM vendors have yet to realize the combined benefits of these two concepts; this can be attributed to the limited knowledge organizations possess regarding both LSS and BPM. LSS emphasizes that technology is not the solution to process problems – and so BPM efforts are dismissed as just mere technology that cannot help the LSS efforts. On the other hand, business process management professionals have limited understanding of the LSS technique and its capability to drive more successful BPM projects.[2]

However, going forward, as BPM adoption increases in industries such as manufacturing and retail, there will be a need for LSS and BPM to work together to achieve process optimization and efficiency. Though LSS focuses on understanding process variance, the challenge of deploying LSS across an organization is that it is labor-intensive to gather data and implement the controls that are recommended by the data analysis. On the positive side, this is one of the key strengths of BPM as it helps in automated controls and gathering data about the performance of processes.

For example, consider a process that is expected to be completed in three days. As currently constituted, the process takes longer and therefore must be optimized. BPM can automate process optimization by automatically collecting data regarding the start time, processing time under each activity, time lag, etc. Six Sigma tools can take this data as input, understand the correlation between the variables, and identify the reason for variance from the expected three days processing time. Hence, by 2015, as organizations look forward to continuously improve their processes, combining BPM and LSS has clear-cut advantages that will encompass process detailing, process-centric data collection, process categorization, Six Sigma report automation, reduced manual intervention and process improvement tracking.

Codeless

The pipedream of the past decade has pivoted around the elimination of coding in BPM tools. This envisages a move to an environment where business people, lacking technical skills, would be empowered to map and re-imagine their business processes without having to rely so heavily on technical resources. Improvements in business process modeling capabilities of BPM tools have allowed business users to provide better inputs into the design, but on the whole progress has been limited.

For the most part, BPM solutions have moved away from the need to write custom code. This has occurred by focusing on giving technical resources the ability to configure business process maps (i.e., equipping BPM solutions with pre-built activities which can be invoked at the click of a button). We expect this to trend to accelerate by 2015, as more and more pre-built activities are provided within BPM software suites. We also expect the configuration to become easier and more intuitive, moving towards a wizard-based option. This would empower business users/subject matter experts to potentially define the flow and key activities.

A classic example in recent years is the method of integrating with an external system, which required coding to write custom simple object access protocol (SOAP) connectors. Most BPM tools now have a library of connectors and can be easily configured following a wizard-based approach in which inputs like a SOAP URL need to be provided; the connector is then automatically defined. This kind of configuration will likely be commonplace by 2015.

What Does it Mean for Your Organization?

If you are a BPM customer looking for a competitive edge over your rivals, then embracing the trends detailed in this paper could prove to be a true differentiator. The key business benefits of adopting the Six C's are best represented in Figure 2.

Benefits of the Six Cs

	Cost Management	Effectiveness of Distributed Teams	Customer Delight	Time to Market	Process Management
Cloud					
Collaboration					
Contextual					
Coverage					
Continuous Improvement					
Codeless					

Figure 2

Considerations for Adopting the Six C's

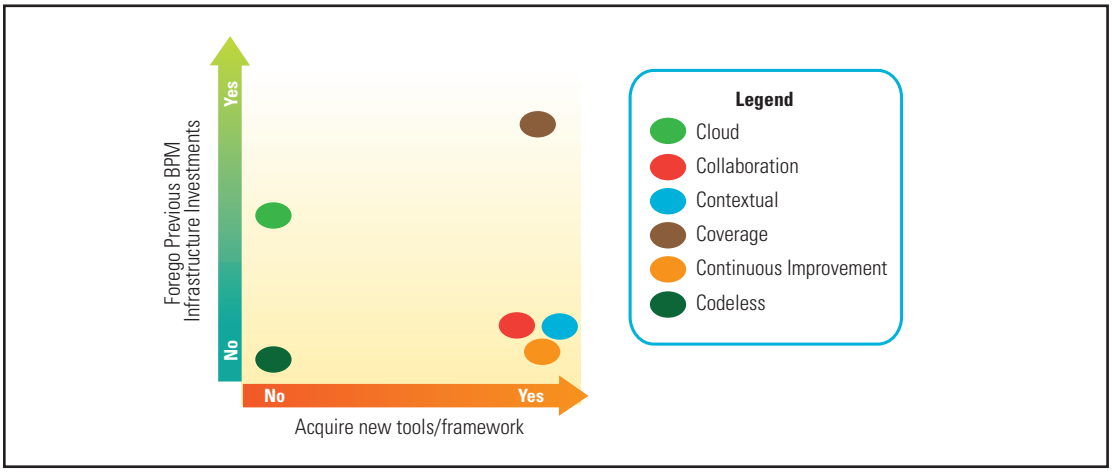


Figure 3

Though the benefits demand a need for immediate consideration, as an existing customer, some of the C's may require your organization to forego existing BPM infrastructure investments, while some may require the acquisition of new tools or frameworks. Figure 3 represents two major considerations your organization will need to take vis-a-vis each C.

However, if your organization is new to BPM solutions, it may first need to consider these trends vis-à-vis your strategic business and IT blueprint and align your BPM strategy with those C's that are most relevant and value-enabling.

Looking Forward

What our research demonstrates is that BPM suites will continue to grow in dimension, embracing emerging trends to achieve a new way for businesses and their associated processes to be managed. With the evergreen trend of convergence, we predict that the six C's illuminated in this paper will shape the BPM market into 2015.

As the saying goes "winners do not do different things, but do things differently," the trends examined in this paper suggest that the forecast for 2015 is not too different from the developments that got BPM to its current state. The real game-changer will be which of these trends are embraced and aligned with your organization's

Footnotes

[1] "Worldwide Business Process Management (BPM) Market Opportunities Strategies, and Forecasts, 2009 to 2015", WinterGreen Research Inc, July 2009, http://www.giiresearch.com/report/wg94582-bpm-mkt-oppor.html

[2] "Power of two: Combining lean Six Sigma and BPM", April-2007, Lance Gibbs & Tom Shea, http://www.bp-3.com/documents/Lean%20Six%20Sigma%20and%20BPM%20-%20The%20Power%20of%20Two.pdf

About the Authors

Rohit George is an Associate Consultant in Cognizant Business Consulting and advises clients on BPM best practices, tool selection and program execution. He has four-plus years experience in the IT industry spanning solution development, business analysis and business process consulting. Rohit has a B.E. degree from Anna University and his MBA degree from the Asian Institute of Management. He can be reached at Rohit.George@cognizant.com.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and approximately 137,700 employees as of December 31, 2011, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.

World Headquarters
500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll Free: +1 888 937 3277
Email: inquiry@cognizant.com

European Headquarters
1 Kingdom Street
Paddington Central
London W2 6BD
Phone: +44 (0) 20 7297 7600
Fax: +44 (0) 20 7121 0102
Email: infouk@cognizant.com

India Operations Headquarters
#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: inquiryindia@cognizant.com