



White Paper

The BPM Renaissance

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Business process management (BPM) has been undergoing a transformation, as the stable, repeatable, back-office processes that were BPM's domain give way to the dynamic, customer-facing processes most important to today's increasingly digital organizations.

This new focus for BPM requires greater scale, flexibility, and collaboration than earlier approaches. Rising to these challenges are a plethora of cloud-native computing, DevOps, and digital process automation technologies.

Cloud-native computing extends the benefits of the cloud to all of IT. DevOps leverages automation to support greater collaboration across the application development lifecycle.

Digital process automation technologies speed the automation of processes while removing the hurdles that slow down the iterative collaboration essential to maintaining a focus on customer needs.

All of these technological and organizational trends combine into a single, overarching concept: *digital transformation*. Such comprehensive, customer-focused transformation is difficult, and many organizations will fail.

The companies that succeed will have transformed BPM to meet the needs of customers in the digital era, while the companies that fail in this mission will become less relevant and competitive.



The Shifting Context for BPM

Today's enterprise professionals may associate *business process management*, or BPM, with software – but managing business processes dates back well over a hundred years, long before companies owned computers.

In the early twentieth century, managing business processes meant ensuring that workers did their jobs properly and efficiently – in particular, when individual tasks were repeatable. Assembly lines depended on rapid, proper execution of such tasks, and businesses soon found that white collar processes, like those in sales and marketing, also benefitted from such management.

The ERP model for what sorts of business processes the organization should automate and how it should go about managing those processes fundamentally drove enterprise computing for the next 40 years.



The rise of corporate computing after World War II brought automation to the table, first for routine calculations, but over time, with more complex tasks as well. By the 1970s, software vendors delivered *enterprise resource planning* (ERP) software to market – complex enterprise applications that automated an increasingly wide range of back-office processes that included tasks that cut across different divisions in the organization.

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In this context, the management of business processes centered on understanding and modeling existing processes and then undergoing some sort of process transformation with the goal of becoming more efficient.

The software of the day, in turn, focused on managing and automating stable, repeatable, back-office processes like order-to-cash and procure-to-pay in order to reduce cycle times, increase productivity, and ultimately to increase profits from mature product lines and industries overall.

Such was the state of affairs until the mid-2010s. Even the Internet and the rise of cloud computing merely scratched the surface of this half-century old approach to BPM.

That is, until enterprises accepted the challenge of digital transformation.

In spite of its name, this trend is more about customers than it is about technology. Digital transformation represents an end-to-end business transformation that rethinks how the enterprise meets customer needs, breaking down organizational silos and then leveraging modern technology to align the organization with customer demands and preferences.

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Such transformation shakes the business processes in the enterprise at their foundation. Management's focus necessarily shifts to dynamic, customer-facing processes. No longer can organizations manage their processes in silos from a single perspective.



In the digital world, BPM must be both collaborative and iterative. BPM will never be the same – and in the digital era, it's more important than ever.

Reinventing BPM from the Infrastructure Up

Neither the Internet nor the cloud alone was sufficiently transformative to shift BPM off its focus on stable, back-office processes. Instead, a fundamental shift in business priorities gave BPM the push it needed.

Customer-centric digital pressures have been driving new requirements for flexibility and scale for the processes enterprises seek to manage and automate. The combination of these diverse business pressures, combined with ongoing technological innovations have given rise to a new approach to enterprise information technology (IT): *cloud-native computing*.

Cloud-native computing is an approach to enterprise IT infrastructure, architecture, and applications that seeks to apply the best practices of the cloud to all of IT. Such practices include unlimited horizontal scalability, rapid elasticity, dynamic resources delivered via Software-as-a-Service (SaaS) business models, and self-service configurability.

Today, the rise of Kubernetes as the open source container orchestration platform of choice has been driving interest and innovation in cloud-native computing. Yet, while Kubernetes is its flag bearer, this movement goes well beyond any single piece of software.

Cloud-native computing is more about how the technology community at large is rising to the broad challenges facing enterprise IT – primarily because of digital transformation priorities.

In particular, the digital era's renewed customer focus is driving massive scale requirements for BPM, as well as a raised threshold for the flexibility of the processes under management.

No longer do static processes that meet historic budgetary constraints delight customers, especially in the consumer space. Given the immense competitive pressure for each consumer's business, such enterprises must individualize their interactions with each customer throughout that individual's entire customer journey.





To support this customer-centric vision for business processes, each organization must rethink how it goes about managing, optimizing, and automating each process at scale.

The urgency of these priorities is perhaps most obvious to enterprises who serve large consumer customer bases – although by extension, such priorities apply to every organization, as today's B2B customers as well as employees expect a consumerized experience when they are interacting with large organizations.

Leveraging cloud-native infrastructure is becoming the most important technique for meeting these new requirements for flexibility and scale, while still managing costs, security and compliance requirements, and the overall quality of the software.

In particular, containers and microservices are essential building blocks for modern BPM, as they enable organizations to deploy flexible software at scale.

As business processes under management become more dynamic, the more important observability becomes for BPM as well.



Earlier technological foundations for BPM, including ERP applications, enterprise middleware, or coding-centric frameworks like .NET or Java EE simply did not rise to the challenges facing BPM in today's digital world. Legacy BPM technologies proved too inflexible and limited to meet today's customer-centric needs.

In addition, cloud-native computing raises the bar on operational (ops) management with its emphasis on *observability*. Observability combines traditional ops monitoring with greater empowerment for the operators responsible for maintaining the ongoing functionality of the operational environment.

As business processes under management become more dynamic, the more important observability becomes for BPM as well.

When process automation focused on stable, back-office processes, traditional ops techniques would suffice to maintain the operational environment. Today, modern,



cloud-native BPM tooling must support cloud-native observability in order to ensure adequate quality of service necessary to meet customer demands.

Rethinking How Organizations Go About BPM

Since the dawn of commerce, the people who *execute* business processes are generally different from the people who *plan* and *manage* them.

BPM was the sole province of managers, who would model, plan, and optimize the processes that their workers would execute. The work of such managers, therefore, was entirely distinct from the efforts of their workers.

In the digital era, the distinctions between managers and workers are blurring and so too are their respective efforts around business processes. As organizational silos give way to horizontal, collaborative organizational models, BPM must also become a collaborative, iterative set of activities that brings together managers, workers, and technologists.

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Both the software methodologies and the tooling to support them are transforming to meet the challenges of this new context for organizing work in the modern enterprise.

Lessons from Agile and Lean software development approaches including quick iterations and a relentless focus on customer value are now providing a new framework for BPM.





It's no surprise, in fact, *digital process automation* is becoming an increasingly important part of the BPM landscape, as enterprises are leveraging low-code tooling to foster better collaboration among all of the individuals involved in planning, managing and executing business processes.

What about the Software Developers?

In spite of its progress, many software developers are reluctant to support low-code platforms, as some of them fear that such technologies will yield poor results, while others are afraid low-code will take their jobs.

In truth, neither eventuality is likely, as low-code tools continue to mature, and seasoned software engineering skills remain in strong demand. On the contrary, low-code is actually becoming an important enabler of *DevOps*.

DevOps represents a cultural and organizational transformation of how application development teams build and deploy software. DevOps leverages automation technologies in order to achieve both continuous integration (CI) and continuous deployment (CD) of software – essential for achieving the speed and agility requirements in digitally transforming enterprises.

Up until this point in time, DevOps has centered on hand-coding as the primary approach to creating software, but this situation is changing as process automation tools accelerate the development tasks that often form bottlenecks that constrain the priorities of CI/CD.

Today's enterprises are thus at a crossroads: DevOps, cloud-native computing, and BPM are all transforming the context for software in the enterprise, and they all intertwine in order for organizations to achieve the best results for their customers.

There are many moving parts to this story, and many things can go wrong – but for the organizations that are able to successfully piece this narrative together, the benefits are astounding: scale, speed, and flexibility, all aligned with the ever-changing demands of customers.

Today, few enterprises can as yet check all these boxes. Making progress with any of these technology trends can put one organization at a competitive advantage over other companies.



Those enterprises who take a leadership position and put all the pieces together will find themselves well ahead of their competition as they will be able to delight their customers like never before.

Reinventing the Customer Journey

So many areas of enterprise technology are undergoing such dramatic transformations that it may seem that BPM is merely a rowboat in a hurricane, an irrelevant piece of flotsam at the whim of much greater forces.

Don't be fooled by the turmoil, however. The entire notion of process automation is undergoing a renaissance, as yesterday's staid, stable, back-office processes become a smaller part of the digital story.

Historic approaches to process automation are giving way to dynamic, collaborative, customer-facing processes that represent the entire customer journey that digitally transformed enterprises must focus on.

Modern BPM, along with all of the supporting technologies and approaches in this paper, are finally able to make this dream of a customized customer experience a reality for any enterprise.



Not only are these processes inherently dynamic, but they are also becoming increasingly personalized. After all, there is no better way to delight a customer than by giving them a unique experience custom-tailored to their needs.

Modern BPM, along with all of the supporting technologies and approaches in this paper, are finally able to make this dream of a customized customer experience a reality for any enterprise.



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Make no mistake, however – such personalization requires massive scale, both in terms of the cloud-native infrastructure as well as the BPM effort itself.

Some enterprises may find that some of their processes have tens or even hundreds of thousands of process instances running at any one time – *all of them different*. BPM has never been able to handle such a situation before, and now people are beginning to take it for granted.

The Intellyx Take

It's essential to remember that this modern approach to BPM is not simply old BPM with better and faster technology under the covers. In fact, it requires a complete end-to-end and top-to-bottom rethink of what business processes are and how to manage and automate them.

Cloud-native computing is one piece of this puzzle, as it provides the dynamic scalability and observability essential to running modern, customer-facing processes.

Digital process automation is another piece, simplifying application and process development activities while fostering greater collaboration across all parties interested in defining, managing, and automating processes.

DevOps and CI/CD are also essential parts of the puzzle as well, as DevOps' collaborative nature and automation-driven capabilities bring whatever sophistication the organization needs to its processes while maintaining the scale and speed so essential to meeting the needs of today's customers.

If all of these elements are pieces of the puzzle, then the *puzzle itself* is digital transformation. Customer-driven and technology-empowered, digital transformation represents the big picture of all the changes organizations large and small must undertake to establish change itself as a core competency in order to meet the ongoing, dynamic needs of customers.

It's a tall order to be sure. A few will succeed and many will fail, but every company must make the attempt. Is your organization ready and willing to do what it takes to become a digital enterprise?



About the Author: Jason Bloomberg



Jason Bloomberg is a leading IT industry analyst, author, keynote speaker, and globally recognized expert on multiple disruptive trends in enterprise technology and digital transformation.

He is founder and president of Digital Transformation analyst firm Intellyx. He is ranked among the top low-code analysts on the <u>Influencer50 Low-Code50 Study</u> for 2019, #5 on Onalytica's <u>list of top Digital Transformation influencers</u> for 2018, and #15 on Jax's <u>list of top DevOps influencers</u> for 2017.

Mr. Bloomberg is the author or coauthor of five books, including *Low-Code for Dummies*, published in October 2019.

About Camunda

Camunda is an open source software company innovating process automation with a developer-friendly approach that is standards-based, highly scalable and collaborative for business and IT. A community of thousands of users across companies such as Allianz, ING and T-Mobile design, automate and improve mission-critical business processes end-to-end with Camunda.

Our workflow and decision automation tools enable teams to build software applications more flexibly, collaboratively and efficiently, gaining the business agility, visibility and scale needed to drive digital transformation.

Thousands of teams chose to use Camunda because:

Camunda software provides the confidence that their business processes run exactly how they want them to run – because **business stakeholders** can participate in the design process and **collaborate with developers** every step of the way.

Camunda's **lightweight and highly scalable software** designed to automate high volume and complex processes.

Camunda provides **transparency and insight** into the health of their business processes, how they perform and identify opportunities for improvement.

Camunda uses a developer-friendly, **open source and standards-based approach** that enables highly efficient and cost-effective process and decision automation without 'vendor lock-in'.

With Camunda organizations can be more **business agile** and rapidly change their business processes using open BPMN and DMN standards that are easy for developers to integrate, build and maintain.

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