Systems and practices which allow organizations to understand and act on their processes have evolved and taken on new importance in recent years as companies embark on digital transformation and automation journeys. And rightly so, since more than 70% of digital transformations fail – often because companies take a “technology first” approach. It’s hard to blame them, because the siren’s song of cloud and SaaS, workflow automation, Robotic Process Automation (RPA), machine learning and Artificial Intelligence (AI) is pervasive and hard to resist. Only recently have best in class organizations begun to re-embrace what was traditionally called Business Process Management (BPM), and enthusiastically capture, model and collaboratively optimize their crucial business processes before jumping ahead to technology. Rules before tools, as we like to say.

And after applying RPA and/or workflow automation to specific tasks or broader processes, everything must be measured and governed, not just for continuous improvement, but because the risk of falling out of compliance is high.

Ultimately, with BPM, new processes can be flexibly designed, implemented, monitored and improved. Existing processes can be discovered, mapped and optimized. And all processes can be shared and managed across an enterprise like the portfolio of valuable assets that they are. Process is at the center of everything, and when properly implemented, the right BPM platform will improve efficiency and productivity, while reducing costs, errors and risks.

But what exactly does a good BPM platform look like? What tools and features should it have? The following are five mission-critical BPM must-haves that will enable companies to survive and thrive in the era of Digital Transformation.

1. **Process Optimization through discrete simulation**

"What if ...?" – Three simple words, with so much weight. What if we could hire more people, buy new equipment or improve quality? What would the impact be? What if we could predict these impacts without incurring costs for additional employees or materials or disrupting the real process? This is where the simulation comes in: it allows organizations to experiment with many different scenarios and many "What if...?" questions, always with the aim of optimizing processes and aligning them with the company’s strategy, risk, resources, KPIs and technology. A global survey of 516 CIOs conducted by Oxford Economics shows how important it is to align Digital Transformation goals with business objectives. According to the study, only 21 percent of German CIOs say that they set very effective corporate goals that penetrate all areas of the company. This is further validated by McKinsey, who cites research saying that only 16% of digital transformations last year successfully improved performance and equipped the companies to sustain changes in the long term.

**Real image and process optimization through discrete simulation**

There is more to the word "simulation" than you might think. There are different types of simulation. The two most common are Monte Carlo (static) and event-oriented simulation (dynamic). Monte Carlo simulation simply means solving a formula repeatedly, so you simplify the complexity in practice. Many simulation solutions on the market offer a Monte Carlo simulation. If a company wants to simplify its processes in order to get answers to questions, Monte Carlo may be the right way to go.

As a rule, a BPM platform can simplify the Monte Carlo simulation model – by not modeling influencing factors that occur in real-world processes, such as resources or schedules. But there is so much more that can be done if a company wants to make full use of the power of simulation. Discrete Event Simulation (DES) can be used to deliver results that Monte Carlo tools cannot deliver, such as bottlenecks, actual resource utilization, complex interactions between process paths, or process optimization.

The Statistical Design of Experiments (DoE) enables several random simulations, each slightly different from the other to show actual process variation. Furthermore, by integrating statistical tools such as Minitab or JMP, one can find the "optimal" point within the results of statistical design of experiments.
5 Must-Haves of a BPM Platform for Growth & Digital Transformation

A little note for the simulation “propeller heads”

For those who are in love with detail: Dynamic analysis is simply not possible in a static analysis (deterministic or stochastic) like Monte Carlo’s. A good simulation tool should be able to deliver the:

- Analysis of resource conflicts between multiple process activities
- Analysis of work rules, such as waiting when resources are unavailable, and rules for overtime
- Distribution of resources between swimlanes (mono- or bi-directional) depending on workload
- Impact of queue work and queue rules (for example, FIFO, LIFO). This is especially important when presenting transactions that represent different products or services
- Routing by transaction attributes (product or SKU type, processing time, resource, device selection based on an attribute of work and/or the current status of a step)
- Machine or other process switches triggered by the dynamic arrival of transactions with different attributes with drive settings or switching.

Identify risks - fast, direct and sustainable

Workflow-based risk management is also a crucial BPM must-have. Capturing risks is only the start. How many times have you documented a Risk or Opportunity yourself without actually mitigating or executing? If documentation is the only goal, you won’t win much. That is why, in addition to simply recording, it is imperative to create a consistent means to operationalize and measure risks.

Ideally, risks should be captured, and then directly evaluated and monitored with a customized workflow — all on a central BPM platform that enables companies to easily document, optimize, and manage business processes. The identification and assessment of risks should company-wide and should enable the generation of suitable and sustainable measures.

Risk matrix and tailor-made work-flows

Workflow-based risk submission can be used to leverage the company’s swarm intelligence, as all employees participate in identifying risks. The risk manager can now assess the risk and place it precisely in the global process landscape. From this point on, the monitoring of risks starts and facilitates the preparation of measures. An automatically generated risk matrix supports the overview and makes it easier to identify the impact of the risk on the respective process. Measures can now be created and monitored in the process, which is also linked to the risk. In this way, a true gap analysis can be created, and it becomes possible to track whether the measures are effective. In short: extensive risk reporting.

Since work-flow-based risk management clearly identifies which activities require attention and which processes could be automated, strategic decisions are much easier. By optimizing and controlling the core processes and their automation, companies can ensure that all processes run in compliance with the rules throughout the organization. This is how one develops from pure documentation to positive development and real transformation.
5 Must-Haves of a BPM Platform for Growth & Digital Transformation

3 Why performance and scalability are so important to a BPM system

In a larger company, when you use a BPM system company-wide, you can quickly reach user numbers in the six-digit range (i.e. hundreds of thousands of users), which can dramatically tax performance. But even in small and medium-sized companies, users expect their software tools to react accurately and in real time. Poorly performing platforms, especially when mission critical, inherently create inefficiencies and unhappy users. Flawless performance, on the other hand, also supports the general adoption of the system, as users are much happier to work in a system without endless load times and "please wait ..." messages.

Senior executives are keenly aware of this, with 46 percent saying they want daily updates on how software systems are performing for employees and customers, according to a study by New Relic. Similarly, 40 percent of CEOs say they want consistent, detailed information on downtime or performance issues.

Archive large amounts of data easily and become audit-proof

In turn, process management does not only include processes, but also other documentation, such as work instructions, forms or other guidelines. Therefore, it is imperative that a BPM platform is scalable and can manage any kind of documents in whatever volume is appropriate for the business. Users typically need to document and link files together - ideally in a system without media breaks. Add to that the requirement that there should be no limit to the size of any single document and that all documents can be fully versioned and released. This also ensures that users with defined permissions can see the right documents at the right time. A BPM software platform should provide all this without hidden incremental costs.

Scalability, fast response time, low load times and audit-proof administration are BPM must-haves.

4 Tailor-made solution for the requirements of the company

We live in an increasingly data-driven world. McKinsey calls it "The Age of Analytics" and claims that companies need to incorporate analytics into their strategic decision-making to take advantage of the massive amounts of data. The volume of data is doubling every three years and leading companies are using this new information to improve their core activities and develop brand-new business models. Leaders need a cohesive tool to capture core data from multiple storage systems and use that aggregated data to accurately measure progress.

Ideally, a company should set up a control center to handle this aggregate data. Such a control center provides comprehensive insights into all operational aspects of business activities and a consolidated real-time view of the performance and reliability of people, processes and technology.

No two companies are alike. The Dynamic Needs and Abilities – in other words, the DNA of the company – can change the way it approaches and deals with implementations, problems or projects. Even in companies in the same industry. Adapting your BPM solution to the needs of your own business, even for things as simple as your logo or corporate color, can be prohibitive or very costly for some BPM providers. A BPM system should therefore always allow for an individual look, personal data fields and different data types. In addition, these data points should not only be defined within the BPM platform but reused and replayed. There should be an opportunity to store documents and reports in a central location to initiate collaborative process improvement initiatives. Every company has its own DNA and therefore its specific and individual needs.

In addition to the pure BPM system, a global team of consultants and partners is essential to help the company achieve its goals, define the roadmap for success, operationalize its strategy, and achieve rapid and sustainable profits.
5 Must-Haves of a BPM Platform for Growth & Digital Transformation

Nobody can get past security

According to Forbes, 83 percent of corporate workloads will be in the cloud by 2020 and 94 percent of businesses are already using the cloud for parts of their business today. Issues that reoccur with software as a service (SaaS) and cloud computing often relate to IT security: where is the SaaS solution being hosted and what is its architecture? Due to government regulation, hosting in a specific geographic region is particularly important to many companies. Germany and Japan are good examples of this. In addition, large, multinational organizations need to coordinate hosting in multiple regions around the world.

Not all cloud solutions are the same, and from a security perspective, many alternatives are left to be desired. To reduce security risks and ensure compliance, the following should be considered when choosing a SaaS BPM solution:

- Companies should be able to start small and grow. As branch offices change locations, the company often relocates services to dozens of data centers, all of which are certified to the highest standards, worldwide.
- Disaster recovery and global redundancy must be ensured at all levels desired by the organization.
- For pharmaceutical companies, industry-specific environments that are compatible with medical and pharmaceutical computerized system validation are important.
- A BPM software should allow full data isolation per tenant so that it does not have to share servers and bandwidth.
- Confidence that intellectual property and personal information will be securely stored in the cloud. Certifications such as SOC 2 or ISO27001 ensure this.

Today, no company or SaaS provider can afford to bury their heads in the sand when it comes to data security. With the introduction of the GDPR in May 2018, data protection became a global focus of attention and the focus will continue to intensify as similar laws are adopted around the world.

Conclusion: BPM platform as an important enabler of digital transformation

Undoubtedly, digital transformation is a strategic challenge for companies. However, choosing the right BPM platform can make the steps to achieving digital transformation much more intuitive, and dramatically increase likelihood of success. BPM is an important enabler, allowing organizations to holistically model, analyze and automate processes and to transfer previous structures and business models to the digital world. Then, comprehensive process management allows companies to maximize customer journeys by linking internal and external business processes and responsiveness to changes in customer expectations. And finally, integrated process automation not only drives successful digital transformation, it also ensures that a continuous improvement process is established and that organizations can survive and thrive in the face of future market changes.

Be sure to choose the right BPM solution.