The Rise of the Process Digital Twin

There is simply no way to systematically improve your business processes before understanding what they currently are and, most importantly, how they perform.

When employees are frustrated with poor internal processes, it affects your customers. Until now, understanding how internal business processes actually work took traditional process evaluation methodologies that heavily relied on manual, sampling-based process discovery, mapping, and analysis. However, such evaluation methodology has long been regarded as costly, subjective, and painfully slow. These methods often fail to keep pace with leadership’s performance improvement demands.

In the modern age, one of the side effects of the digital era is the wealth of data captured by every platform involved in an organization’s business operations. The challenge—and phenomenal opportunity—is to cost-effectively and easily convert the plethora of data points generated by these operational systems into a comprehensive, understandable, and usable end-to-end view of process execution.

Business intelligence (BI) does not solve this challenge. BI is fantastic at providing any number of point-in-time snapshots of key business metrics, but it fundamentally struggles with joining any temporal series of events together and fails miserably at providing any meaningful, process based analytics.

There is, however, an answer: a platform designed specifically to aggregate and organize the data points left behind in the audit logs of any existing software application. This field of study emerged around 2010 as process mining, and has now evolved into a class of products collectively referred to as Process Intelligence. Process Intelligence is a fast emerging, essential business strategy that will enable organizations to take control of their processes and provide an opportunity to drive towards continuous and sustainable process excellence through the utilization of an interactive “digital twin.”
For the first time, it is possible to visualize and understand how your operational processes are really executed from end to end, in all their variations, across any number of systems. Sophisticated Process Intelligence tools make it easy to identify impactful process deviations, reveal potentially high-ROI efficiency improvements, expose glaring compliance risks, and zero in on the root causes of specific behaviors. Effectively, Process Intelligence brings diagnostic analytics to augment any existing analysis efforts, therefore making it extremely complementary to BI investments.

A process digital twin not only delivers 100 percent visibility for any process flow executed by your IT systems, but it also makes it possible to understand the complex dynamics that drive unexpected or undesired behaviors. Chances are you already have a significant investment in enterprise IT systems, as well as any of a variety of departmental systems. Process digital twins ensure every meaningful piece of information is tracked and saved for later analysis.

**Build your own process digital twin**

The digital twin concept is at the heart of the ABBYY Timeline Process Intelligence platform, but it does not stop at a retrospective view of how your processes have been executed. It becomes a living, interactive visualization of how your processes are actually performing in real time. Once a process has been visualized, analyzed, assessed, and optimized, don’t settle for any backsliding. Graphically build in execution rules and automatically monitor for deviations in real-time process flows.

KPIs, SLAs, sequence execution, compliance rules—build them and forget about them until process deviation triggers action.

Now add the ability to predict timings of activities and process outcomes, and you realize the power of an interactive, modern-age digital twin.

Timeline Process Intelligence unlocks more value by automatically discovering process flows, providing sophisticated tools to analyze process behaviors, and helping you optimize productivity and improve customer satisfaction. Monitor process execution in real time to sustain peak performance, and predict process outcomes early in the sequence to ensure positive results.

By offering the ability to understand process data in more detail, Timeline allows analysts to provide more information about how business processes flow and which processes need to be improved. This reduces time and money spent on uncovering and improving inefficient processes.

Building an interactive digital twin is key to a sophisticated Process Intelligence strategy. Historically, analyzing process data has required a lot of work with minimal results, often demanding manual review or writing of code to get the answers. These answers still missed the mark in providing accurate, in-depth process insight and understanding. Manual process assessment provides dated, sometimes inaccurate, and often subjective feedback. With Process
Intelligence, there is no need for coding, and uploading data happens in real time. With a point-and-click interface and automatic KPI calculations, Timeline Analysis technology helps take process analytics to the operational level.

Process stakeholders need to understand all aspects of their processes, like where and when tasks happen, what procedures are supposed to be followed, and under which conditions they are happening. Most of the time, though, process leaders do not have the proper tools or resources to investigate a process through its entire lifecycle in a way that ensures 100 percent accuracy and reliability. While traditional business intelligence tools provide big-picture information, they do not provide the diagnostic analytics that provides the business user with a detailed description of what is happening in terms of the processes across business units, regions, or IT systems.

We are in the era of big data, and our systems of record contain a plethora of valuable information. With this information, business users can now detect bottlenecks that might be causing errors or increased lead time, reveal the most frequent execution paths, expose broken process variations, and easily identify many other hidden inefficiencies within processes.

Your digital twin

A process digital twin will help you improve every aspect of your business processes. Converting the process data available in your IT systems into actionable insight results in more accurate improvement decisions, made faster and at lower cost. The ABBYY Timeline solution offers organizations the confidence of making data-driven decisions that have sustainable impact on any aspect of service delivery. Our secure, cloud-based platform enables process discovery, analysis, automated monitoring, and prediction 24/7/365, from anywhere in the world you can access a web browser.

Ready to see your very own process digital twin? See how companies like yours are using Timeline Process Intelligence. Visit www.abbyy.com/timeline to learn more.