Going Beyond

Business Intelligence & Process Mining

ABBYY

Table of Contents

Introduction

Timeline Analysis™ is a unique, patent-pending approach to capturing, organizing, and presenting process event data. This powerful methodology reconstructs your original process instances, step by step, from event data left behind when they were performed and then helps you by automatically monitoring process execution in near real time, and alerting staff for conditions you can easily specify.

Understanding process analytics

Process analytics is an extremely effective way to help an organization find where inefficiencies are occurring, time is wasted, bottlenecks occur, and any other issues plaguing processes.

Identifying these areas within operations can ultimately improve a process and save companies time and money. The main purpose of process analytics is to learn about what the current process is, who is involved, how long a process takes, and where improvements can be made. With this information, it becomes obvious which steps or events need to be improved.

Process Intelligence, the next generation of process mining, combines business intelligence (BI) type of metrics with business analytics to provide insights into the end-to-end processes of the company and helps with bridging gaps between different systems. With Process Intelligence, business users can now view and analyze

the patterns within their processes. Instead of using historical data to make current changes, viewing the processes in real time allows the user to save time and money and increase efficiency within the company.

Process Intelligence is a vital part of most modern businesses. It allows insight in making accurate and timely business decisions because it eliminates guesswork. No longer do companies need to rely on their "gut feelings." They will be able to analyze real-time data and use predictions to confidently make the right decision. As companies continuously invest in advanced technology, they are also storing more and more data within their systems.

Own your data. Understand your process. Predict the future. Perform more efficiently.

Once the data is retrieved, companies can utilize Process Intelligence tools to observe it.

Then, they can begin analyzing to dig for any inefficiencies, time consumers or costly events. Finally, utilizing the advanced analytic tools, they can monitor the processes to prove where the changes made have provided the most success.

More work in less time

The role of analyzing data has always been one that requires a lot of work to be put in for little results. No matter what process was being analyzed, the business needs put demands on manually reviewing or writing endless code in order to get answers. Now with Process Intelligence, there is no need for coding, and uploading the data takes almost no time at all. With a point-and-click interface and automatic KPI calculations, Timeline Analysis technology helps take data analysis to the next level.

Process stakeholders believe they understand all aspects of their processes like what and when events are supposed to happen, who is supposed to perform those events, and under which conditions they are happening. Most of the time, though, process leaders do not have the proper tools or resources to investigate their process through its entire lifecycle to ensure 100 percent accuracy and reliability. While traditional business intelligence tools provide big picture information, they do not provide the business user with a detailed description of what is happening in terms of the process across business units, regions, or IT systems.
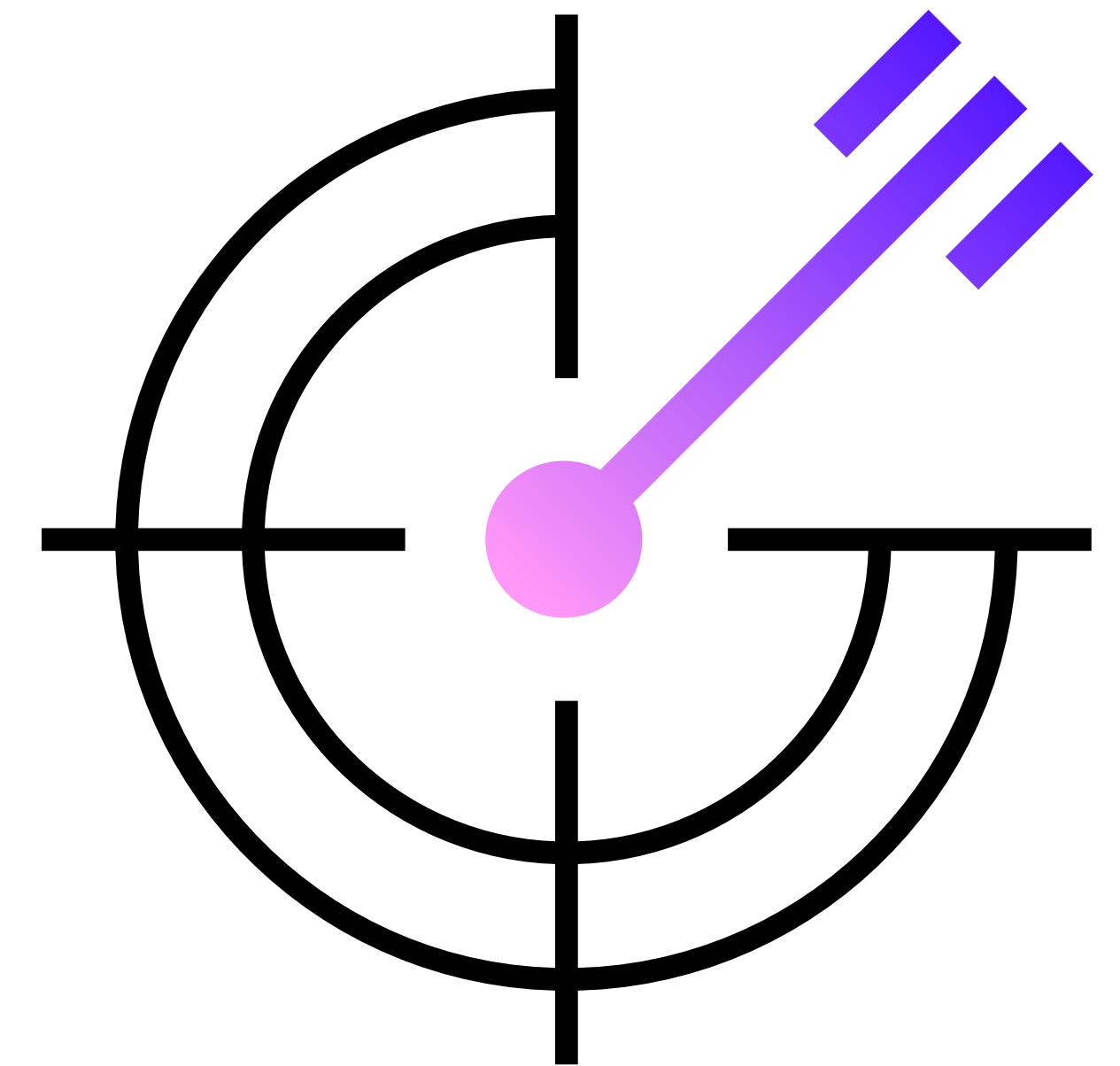
Understanding your business process just got a whole lot easier

Modern IT systems contain great volumes of useful information. We are in the era of big data. This big data contains a plethora of valuable information that when utilized effectively can add huge insight for business users. 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 uncover many other hidden inefficiencies within processes.

With the ability to understand process data in more detail, analysts can to provide more information about how their business' processes flow and which processes need to be improved. This provides the company with more value because it will reduce time and costs spent on uncovering and improving inefficient processes.

Take process optimization to the next level

Intelligent process mining expands process mining across two dimensions ...

... the types of analytics possible, and the types of processes it can be applied to. Standard process mining identifies process-related issues, but intelligent process mining's expanded scope makes it possible to obtain more granular, accurate answers to root cause even in complex environments where ad hoc processes or case management are more common.

Our timeline-based discovery methodology is what enables us to answer more questions, faster, and with greater accuracy, as well as monitor complex processes in real time and alert when things go wrong.

Process Intelligence vs. other process mining tools

The timeline-based approach makes the linear sequence of actions the focus of the analysis, essentially creating the histories of the objects.

Nothing is filtered out or hidden. Then a plurality of highly specialized analysis methods is applied to those raw histories. This approach was specifically designed to overcome the drawbacks of the schema-based approach. This method has no trouble handling irregular and ad hoc processes since the history doesn't depend on the process nature. The non-schema events appear on the actual places in the histories and participate in all kinds of analysis. Entity history is a native representation of the timelines. Compliance is treated as a complex collection of rules, which are applied to the histories/timelines.
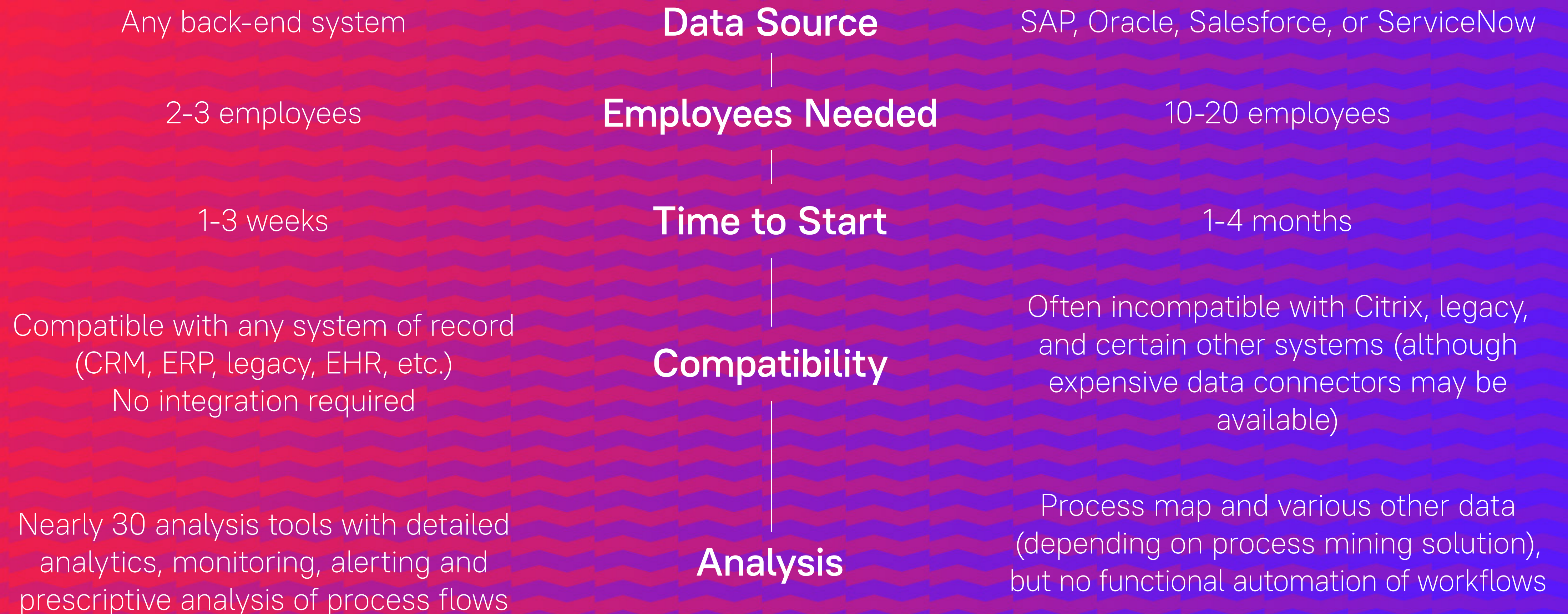
Timeline Process Intelligence

VS

other process mining tools

ABBYY Timeline Process Intelligence

Other process mining tools

ABBYY Timeline Process Intelligence		Other process mining tools
Any back-end system	**Data Source**	SAP, Oracle, Salesforce, or ServiceNow
2-3 employees	**Employees Needed**	10-20 employees
1-3 weeks	**Time to Start**	1-4 months
Compatible with any system of record (CRM, ERP, legacy, EHR, etc.) No integration required	**Compatibility**	Often incompatible with Citrix, legacy, and certain other systems (although expensive data connectors may be available)
Nearly 30 analysis tools with detailed analytics, monitoring, alerting and prescriptive analysis of process flows	**Analysis**	Process map and various other data (depending on process mining solution), but no functional automation of workflows

The Timeline advantage

1   End-to-end transparency

Conventional process discovery has been a manual effort of trying to integrate all data sources into one best fit, the "happy path." This typical approach is time consuming and fails to show all of the special cases involved within a process. Finding these special cases is extremely important to business operations because they may be a large contributor to high costs and unhappy and vocal customers. No matter how many systems store your process data, ABBYY Timeline's intuitive technology provides you with full end-to-end process visualization including every special case.

2   Continuous improvement

Whether it is business process improvement or process reengineering altogether, process improvement never stops. While making these changes, it is equally as important to analyze past performance as it is to monitor initial processes. ABBYY Timeline automatically monitors process performance in near real time, to assist in triggering remediation processes or RPA technologies.

⚙ Quickly create and display process analytics

Within as quickly as two to four weeks, a process analytics platform can be successfully implemented and actively improving your operations. Programming is not required regardless of how complex your processes are. The user-friendly platform makes process analysis easy. Process analytics give far more insight into the performance and execution of business processes than any other solution available today. With advanced analysis capabilities, it is easy to drill in to problem areas and uncover root cause.

3 Reduce time

ABBYY Timeline's technology eliminates manual process evaluation, delivering faster time to value on your process improvement initiatives. With manual process discovery, an employee must identify the key process the company wants to discover, due to the long time and high cost it requires to manually analyze a process.

- Determine the criteria to evaluate performance

- Observe the process

- Conduct interviews

- Create a map of the process flow

- Analyze the data

This process can take one to four months, as opposed to the two to four weeks software takes, and by this time the process may have changed, or new compliance regulations may have been put in place. Due to the time that the discovery took, it does not provide the expected value. Additionally, the discovery is simply what the employee observed and therefore not the true process. This issue of time and reliability can all be avoided with a Process Intelligence software.

⚙ Implement a culture of continuous improvement

In a highly competitive market it has become essential that businesses stay on the edge of trends and continuously work to improve the customer experience while still maintaining a positive bottom line. Continuously defining opportunities for improvement, measuring key performance indicators, analyzing processes, improving the processes, and controlling change will help the business remain profitable and stay ahead of the competition.

④ Reduce costs

ABBYY Timeline drives down the cost of process evaluation and makes it easy to identify high-value improvement opportunities. Additionally, Timeline is able to track the time-related costs associated with a process to identify which process is costing your business the most and where the opportunities to improve are. Anywhere that rework and time can be reduced will provide a direct correlation to reduced costs.

⑤ Reduce compliance risks

Traditionally, compliance checks were done by doing a spot check. One instance of a process would be randomly selected to serve as an indicator if all other times that the process was performed followed compliance. Although this spot check saves money and time in the short term, it is not an accurate portrayal of what is happening with the company. Typically, compliance is only found to be an issue when it is too late to be fixed and has already caused problems down the workflow. Timeline is uniquely different and will allow a user to receive alerts when rules that the user sets in place are broken. The user can then follow up immediately to ensure that it won't happen again. Because this alert happens right away and not in the next month's report, there is still time to fix it and therefore stop compliance violations and costly mistakes. Even better yet, this is all automatically done for 100 percent of the cases.

⚙ Monitor and analyze performance

After discovering and analyzing a company's processes, protocols can be set in place in order to trigger alerts. This ability to monitor and quantify process execution in real time also allows you to accurately assess and validate the return on investment for any optimization or automation initiative.

6 Improve the customer journey

Timeline allows you to observe your "as is" processes so you can make improvements that will increase customer satisfaction. This can be done through analyzing customer journey information. Once this information is uploaded, Timeline can automatically show insights to help you understand customers' behaviors. When these trends are understood in customer engagement, it ultimately helps the business to better serve customers and make their experience better.

7 Ensure peak efficiency

ABBYY Timeline Process Intelligence provides you with the ability to discover, analyze, monitor, and predict within your processes. Utilizing over 25 industry best practice analysis tools, you can analyze and focus on improving business processes with the click of a mouse. Once the improvements have been put in place, you can monitor and be alerted to when deviations do occur. Finally, Timeline provides you with predictive and prescriptive analytics that will show you what the next steps in the process are and provide a solution if they deviate from the most efficient path. All of this in one solution makes it easy for you to ensure your processes are executing at peak efficiency.

If you can't measure it, you can't improve it

Gone are the days of blind guesswork. Fully understand your end-to-end "as is" process and discover valuable business insights to help to justify and implement your business process improvement and business process reengineering goals.

Tips for maximizing the benefits of process analytics

Although Timeline can be a simple platform to use with its point-and-click capabilities and user friendly interface, that does not mean it does not require thoughtful planning in order to obtain beneficial results.

Start small, think big. Begin your discovery and analysis journey with a process that is better known.

Starting a process initiative with something familiar will help you learn to maneuver the platform and allow for quick small wins that lead to big savings victories. Choose a process where the beginning and the end are clearly defined. Each manager of such a process will benefit from insights that help to reduce costs or increase effectiveness.

Focus on the business goal.

Define the business value in terms of effectiveness (customer experience and revenue), efficiency (cost), and risk (reliability), and set goals that you want to achieve.
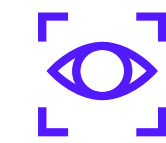
Determine who will be responsible for the project and its accomplishments.

Process improvement and especially process re-engineering projects require thorough planning and work. Therefore, process improvement can't be given to someone who will not have the time for it. A pitfall to many companies is investing in software to obtain process insights that they never fully implement changes to improve. Avoid this challenge by determining who will be responsible for the technology and if they have the time and knowledge to do it properly.
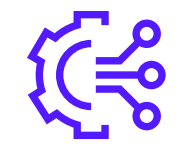
Do not remain stagnant. Optimize your processes iteratively.

Identify ways you can improve with your customer in mind. Now that you have actionable insights, you don't have to make wholesale process changes to see and be able to understand change results and impact. With this new type of analytics, you can tweak and test. You can gradually improve your processes and use your process insights to continue identifying new opportunities for improvement.

Facts don't lie.

Process analytics allows you to analyze processes based on facts instead of subjective opinions. Speak openly and transparently about the data that you use and about the facts that come out of this analysis.

Make your process improvement efforts actionable for workers.

Engage everyone involved. Process improvement and change do not happen in silos. Put a change management team together that has the competency to handle resistance. Try to involve the workforce in the process change as this will increase their willingness to follow the process in the future.
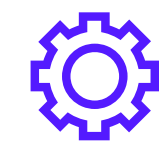
Automate areas of your process to increase efficiency.

Expose redundant, broken, or poorly executed processes, and quickly identify those with the greatest automation potential. Understand how automated processes interact with other process tasks and IT systems.

Process excellence

You might rely on business intelligence systems for monitoring operations and performance, but when metrics fall outside the optimal range, how do you identify the cause? How do you tell exactly which process is underperforming, why it is happening, and where you should take corrective action?

Old methods just don't cut it anymore. The digital transformation sweeping every industry, and one that has relied heavily on traditional BI tools, also birthed process mining and Process Intelligence. Process Intelligence is giving companies greater clarity than traditional process mining and BI have allowed for.

Process Intelligence is moving from an emerging technology to an industry standard. Is your business ready to join the thousands of others that have achieved Process Intelligence?

Process Intelligence dramatically decreases the analysis time to understand business processes. Because of the various paths actual process execution takes and the immense amount of variability in complex processes, it is often difficult to get an accurate picture of how processes operate through manual efforts. Not only that, but it also takes quite some time to learn and understand the process with manual efforts. In addition, everyone pictures the process in their own perspective, biased by their role.

With the power of automatic process discovery utilizing intelligent process mining, these costly, timely, biased, and often inaccurate analyses are avoided altogether. In addition to evaluating abnormalities, this is a perfect time to evaluate where process improvements can be made and where efficiency can increase. With processes that follow rule-based decision making, it is very easy to see deviations, but what happens to the processes that are more ad hoc in nature? This is where a timeline approach to process analysis becomes so valuable. ABBYY Timeline offers that ability to zoom in and drill into the granular details of process execution, so you can gain a complete view of how processes execute "as is" with 100 percent transparency.
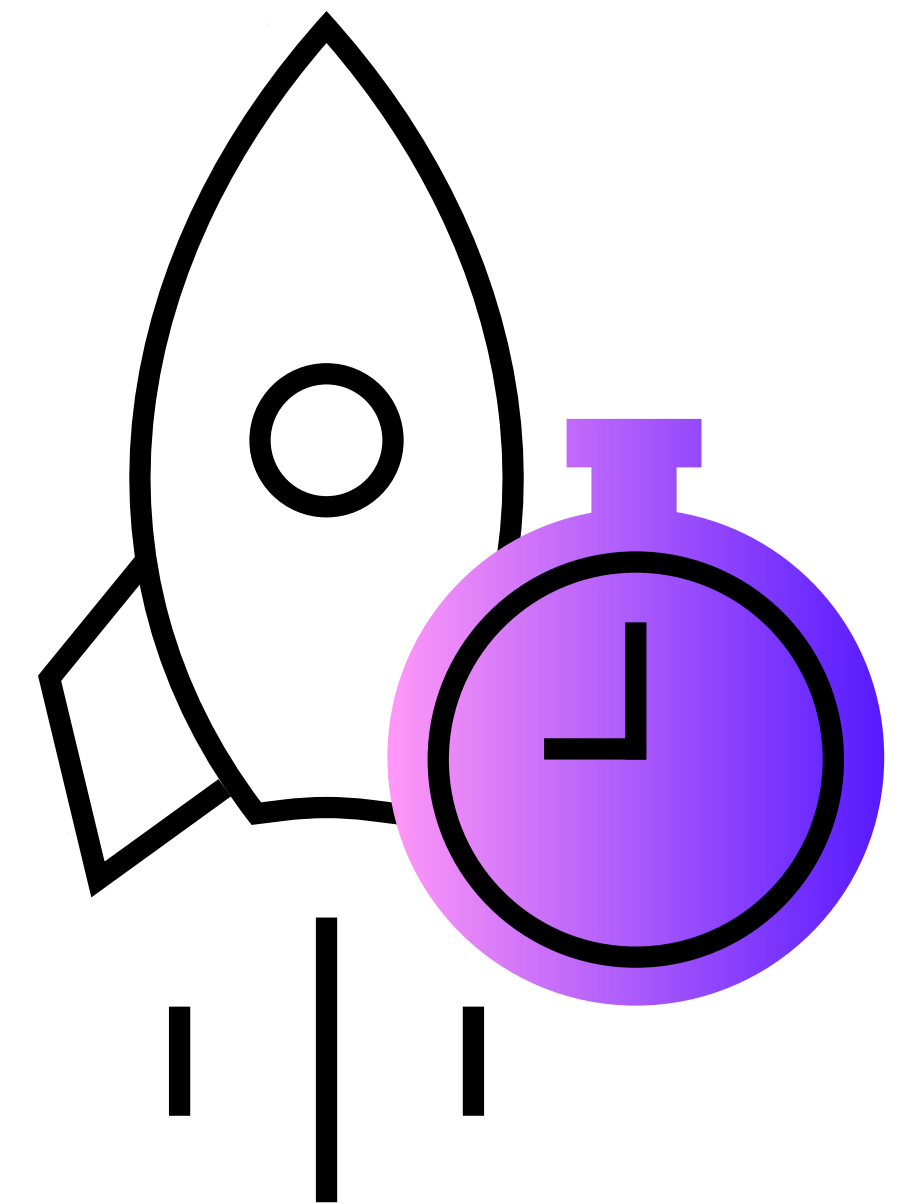
Raise your Process Intelligence

ABBYY Timeline has three pillars built in that help you elevate your Process Intelligence. Within analysis, you can find the root cause and begin to see where improvements can be made to inefficient processes. Once the issues have been addressed, it is important to make sure they do not show up again. Through monitoring and alerting features, you can be certain that processes flow efficiently.

Finally, predictive and prescriptive analytics modules show you what the next steps will be in the process and provide the solution to prevent potential deviations from occurring.

You can't afford to not know anymore

Right now it is expected that businesses are missing out on 50 percent of automation opportunities.[1] This is due to not understanding the process fully and not knowing where to start. With process analytics, there is no question of which process should be automated.

How is Timeline Process Intelligence different?

- Eliminates arduous, costly, and often subjective manual process evaluation
- Easily visualizes end-to-end business processes that span multiple systems to fully define scenarios and permutations pre-automation
- Displays clear, quantifiable post-implementation cost impact
- Provides data-backed justification for future automation initiatives
- Monitors bot-enabled process execution in real time using alerting functionality to spawn automated remediation processes
- Monitors automation's up- and downstream impact to ensure ongoing protocol compliance

Improve your processes
with Process Intelligence

ABBYY Timeline can connect and extract data from practically any system used in the running of your company, including legacy systems, packaged applications (CRM, HCM, etc.), trading partners, and databases/EDW/marts.

Import data into Timeline and instantly gain full transparency and insight into the process. With nearly 30 prebuilt modules, process analysis has never been easier.

Everyone. Everywhere. Every day.

Gain full confidence in your processes through advanced analytics utilizing Timeline Analysis. It's scalable and easy to use. Whether you are uploading one source of data or many, Timeline's no-code, drag-and-drop analytics in cloud capabilities makes process excellence attainable for everyone. The Timeline approach to process analytics helps make everyone a process genius.

Everything the business user needs

Raise your organization's Process Intelligence and become a process genius without the need to be a PhD computer coding engineer or LEAN Black Belt certified. Access to vital operational information shouldn't be limited to analysts and advanced IT users.

With Timeline, common business users can easily build in-depth queries, auto-matically discover process execution, drill in to the granular details with almost 30 prebuilt best practice analysis tools, predict outcomes early on, and monitor operations to ensure processes execute according to plan. All of this is tailored to meet the needs of the business user without coding.
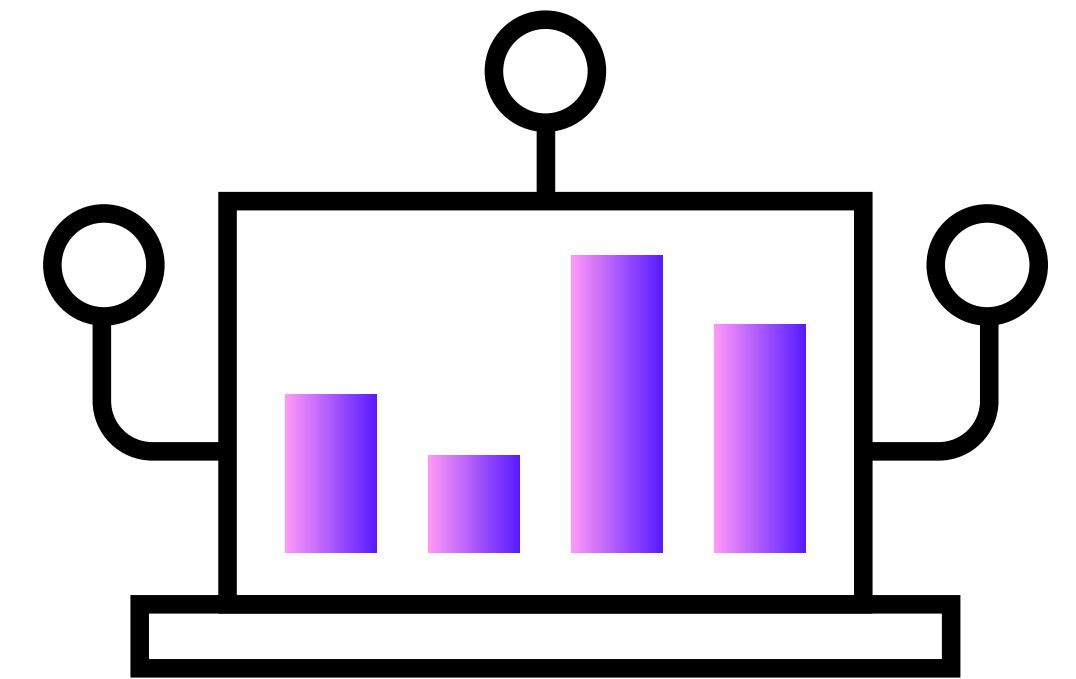
Advanced process analytics anytime, anywhere, for anyone

Processes involve numerous departments, employees, different regions, and multiple back-end data systems.

There's more to your business than just order to cash, procure to pay, and ITSM processes. Improve your entire enterprise with the first and only platform that was built for business users. Many traditional process mining tools are limited to connecting to specific data sources such as SAP, Oracle, Salesforce, or ServiceNow. With Timeline you can load data, discover, analyze, monitor, and improve any business process, on any system, regardless of how simple or complex the process. Timeline has you covered.

Additionally, these tools only allow access on specific devices that have the product installed. With a cloud-based solution, there is no need to log into a certain device in order to see real time process insights. Improve all your business processes anywhere, any time, on any device.

Stop letting "we've always done it this way" hold your company back.

Conclusion

ABBYY Timeline enables sustainable, enterprise-wide process excellence with almost 30 prepackaged analytic tools that make process insight actionable.

Both conventional process mining and Timeline Process Intelligence can help you make process improvement decisions quickly and reliably, but the two types of solutions work quite differently. The power of Timeline comes from its unique Timeline Analysis approach to Process Intelligence.

Timeline gives you full visibility of all your processes from end to end, even when different steps of the process are performed using multiple back-end systems. The result is the ability to visualize and analyze complete processes even when there is no other place to find these details in your existing systems.

Timeline Process Intelligence lets you visualize and analyze any business process without integrating or modifying existing IT infrastructure. Our secure cloud-based platform enables process discovery, analysis, and automated monitoring and prediction 24/7/365 anywhere in the world you can access a web browser.
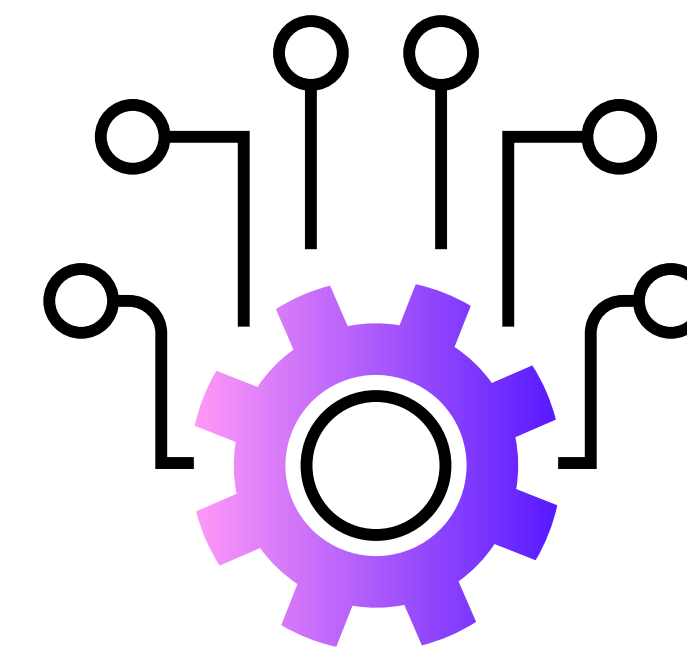
Raise your Process Intelligence

Ready to see what true Process Intelligence can do for your organization?
See how companies like yours are using ABBYY Timeline.

Learn more

ABBYY

WWW.ABBYY.COM