Combining Process & Task Mining for Greater Insight

Q&A with ABBYY

Introduction

We recently spoke to Scott Opitz, Chief Technology and Product Officer at ABBYY, and Ryan Raiker, Sr. Director of Product Marketing, ABBYY Timeline, about the state of task and process mining technology.

Process discovery, also known as task mining, uses a desktop agent to understand the execution of a process through the lens of employees' desktops. Process mining provides an understanding of a process through analyzing event logs from IT systems.

The core benefit of all task and process mining platforms is understanding the flow of operations within a business process and the people, entities, resources, and systems involved. An organization may wish to understand its processes simply to document them and ensure their conformance. However, most organizations now undertake process understanding exercises mainly to identify their process optimization and automation potential.

Task and process mining platforms support these goals by offering functionality such as root cause analysis, scenario simulations, and the ability to export process document documentation (PDD). The latter can be imported directly into automation platforms such as Automation Anywhere and UiPath.

ABBYY, as part of its Timeline offering, is one of the few vendors in the process understanding market to offer combined task and process mining technologies. The Timeline offering supports organizations' entire data collection, transformation, analysis, and improvement pipelines. Unlike third-party process understanding platforms, ABBYY has also integrated Timeline into its intelligent document processing platform to enable organizations to understand how their content-centric processes perform.

Process mining and task mining offer distinct advantages. What is the value of employing both?

Task mining is rapidly gaining traction as more and more businesses discover how it empowers their intelligent automation strategy. It brings a more in-depth view of processes. It allows organizations to understand intimately how people, data, and technology – including legacy and homegrown – work together across the enterprise. It allows companies to monitor how tasks are performed and aims to improve and automate these tasks where possible. Using task mining in synergy with process mining enables *process intelligence* at enterprise scale. This gives business leaders true visibility into business operations that powers process optimization, compliance, and intelligent automation.

Should organizations start with only one (process or task mining) before investing in a comprehensive process understanding journey?

Organizations run into time-to-market problems and high opportunity costs when they try to drive process improvement efforts without first doing the fact-based planning that is so critical. Organizations should start with what matters to them. Task mining alone will not provide a comprehensive and holistic view into complete process execution, while process mining alone will not offer the granular task execution insights needed to identify automation opportunities. Combining both allows for a 360-degree view and deep understanding critical to the success of intelligent automation. We believe that a combined offering is necessary for true process intelligence, and so far, customers agree with this approach.

ABBYY uses the same analytical engine for task and process mining. How does that help a client in understanding the overall process?

ABBYY's task mining and process mining solutions are powered by artificial intelligence to deliver 360-degree visibility into business operations and combine insights from people, processes, and content. This goes beyond traditional approaches like manual analysis and uses data to gain specialized understanding and complete visibility into business processes. Process intelligence allows you to extract data from any combination of your IT systems, combine it with user experiences on the desktop, and recreate end-to-end processes as a process digital twin. This means you can automatically visualize process flow, bottlenecks, and path variations and make data-driven recommendations for improvement.

Is there any reason why process understanding is especially relevant with a hybrid workforce with more workers working from home?

The remote and hybrid work environment exposed how badly processes are causing errors, delays, and frustrations for employees and customers alike. The shortage of talent requires businesses to operate at maximum efficiency. Process and task mining take the blindfolds off IT and management to see how their processes and operations are truly working.

Does every user need a recorder to gain insight into the process?

Every organization has high performers. Sometimes there are team members who far outshine their colleagues in productivity, and then there are those who lag. When you only analyze one or two employees, you lose insight into possible training issues, the use of shortcuts or hotkeys, and you could miss variants from a specific user that you don't account for in your automation. Seeing the varied ways humans complete work can help organizations find the best "happy path" to plan for transformation. It makes sense that you need a mix of users but not everyone. It would be best to have a recorder for a representative sample of user/case types.

Is the primary outcome of the combined task and process mining process still automation? Why is only using one data set not as good as the whole?

Automations span over multiple systems, departments, and process groups. When you can't fully understand all the intricate details and impact of automation on the entire process lifecycle, you risk making mistakes. You can't improve what you don't measure, and it is so important that you have a comprehensive understanding of how processes work before you automate them. Imagine that we decided to let autonomous cars run the streets without ever training them to understand the real world. In essence, this is what so many organizations are doing with their automations. They fail because they never measure success and fail to continue to monitor deployments to ensure they are not running amok.

And what are you doing to help clients avoid automating a poor process?

The challenge for many organizations is understanding how their processes operate in real-time, across diverse functional teams, and within siloed back-end systems. Traditionally, enterprises have tried to generate process insights by utilizing a combination of manual efforts and first-generation platforms, including early process mining and business intelligence, which have proved to be time-consuming, costly, and error prone. As demand and expectations for intelligent process automation skyrocket, vendors and adopters are finding their initiatives unintentionally and often unnecessarily gated by the time and effort required by the pre-implementation task mining and benchmarking of the as-is state. "How do we know what to automate next, and why?"

Before implementing automation, you need to have a complete understanding of how your people are working and processes are executing. This requires you to have full transparency into your business processes and the tasks that drive them end-to-end. When you can visualize and analyze your entire process, you can easily identify which processes would benefit from automation and why. This is critical because if your process is already flawed, automation will only make your bad process faster.

Process intelligence can help organizations easily identify, quantify, and target the highest-impact process instances for digital transformation or automation initiatives.

How does combining the task and process mining data affect the other downstream outcomes? For example, are there any benefits in areas such as conformance checking?

Higher levels of detail in the task analysis will result in a more advanced recording of data. Customized recording allows the agent to track everything that occurs during the execution of the task and can therefore recover information on how each task is run. The same task can be approached differently by each resource in terms of steps performed, time spent, and time lost.

What client acceptance are you seeing for a combined task and process mining approach?

We are seeing that clients are eager to start connecting their people to their automations. After all, understanding the intersection of people, processes, and data is the starting point for true business transformation. The seamless way that ABBYY Timeline integrates process and task mining, and monitors production automations, gives developers and business leaders a clear overview of the full potential of automation and empowers them to react to opportunities quickly and effectively.

How does process understanding fit in with the rest of the work you do at ABBYY on the document understanding and processing side?

Intelligent document processing (IDP) and process intelligence are both essential components of a successful intelligent automation strategy. Today, a typical IA stack includes both IDP and process mining in combination with an automation platform(s). The best-of-breed approach has proven most productive when building an IA stack, as opposed to locking yourself into a one-provider ecosystem.

At ABBYY, our goal is to provide best-in-class IDP and process intelligence to help our customers achieve their business goals. Approximately 80% of business processes are document-centric. The combination of insights into both processes and the documents that drive them enables a whole new level of visibility and allows customers to achieve ROI on automation projects faster and support happier, more efficient employees.

What's on the horizon regarding the combined task and process mining journey?

Understanding the intersection of your people, processes, and data is the starting point for true business transformation. The ability to connect the dots between user task data, system logs, and business data empowers organizations to reduce process friction, improve customer service, and accelerate digital transformation.

The future of work requires us to think about work more fluidly. We must reimagine how work gets done across multiple people, machines, and interactions. Breaking work down into tasks is the most sustainable way to segue into a sustainable hybrid human and machine workforce.

Conclusion

Combining task and process mining undoubtedly improves the overall understanding of a process by using complementary data to gain more comprehensive insight into the process at hand. NelsonHall has expected a convergence in these technologies for some time. With vendors such as ABBYY being early to offer a combined solution, the process understanding market will more efficiently address the challenges of automation and process optimization.