

NEAT EVALUATION FOR ABBYY:

Process Discovery & Mining

Market Segment: Overall

Introduction

This is a custom report for ABBYY presenting the findings of the NelsonHall NEAT vendor evaluation for *Process Discovery & Mining* in the *Overall* market segment. It contains the NEAT graph of vendor performance, a summary vendor analysis of ABBYY for process discovery & mining, and the latest market analysis summary for process discovery & mining.

This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering process discovery & mining technology. The NEAT tool allows strategic sourcing managers to assess the capability of vendors across a range of criteria and business situations and identify the best performing vendors overall, and with specific capability in process discovery, process mining, automation, and workforce optimization.

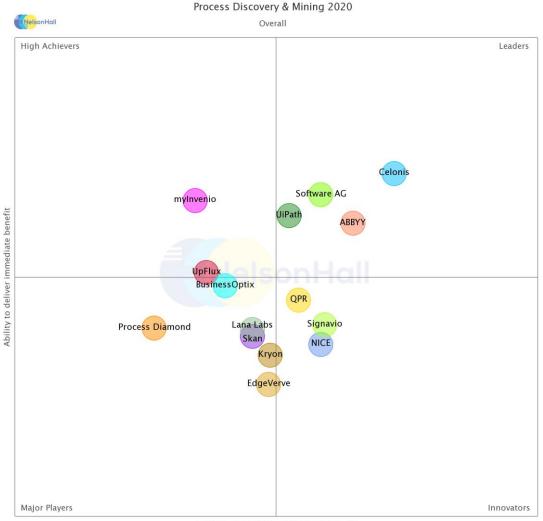
Evaluating vendors on both their 'ability to deliver immediate benefit' and their 'ability to meet client future requirements', vendors are identified in one of four categories: Leaders, High Achievers, Innovators, and Major Players.

Vendors evaluated for this NEAT are ABBYY, BusinessOptix, Celonis, EdgeVerve, Kryon, Lana Labs, myInvenio, NICE Systems, Process Diamond, QPR Software, Signavio, Skan, Software AG, UiPath, and UpFlux.

Further explanation of the NEAT methodology is included at the end of the report.



NEAT Evaluation: Process Discovery & Mining (Overall)



Ability to meet future client requirements

Source: NelsonHall 2020

NelsonHall has identified ABBYY as a Leader in the *Overall* market segment, as shown in the NEAT graph. This market segment reflects ABBYY's overall ability to meet future client requirements as well as delivering immediate benefits to its process discovery & mining clients.

Leaders are vendors that exhibit both a high ability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet client future requirements.

Buy-side organizations can access the Process Discovery & Mining NEAT tool (Overall) here.



Vendor Analysis Summary for ABBYY

Overview

ABBYY Timeline is an all-in-one platform for process mining that is aimed at the business user that offers:

- Data extraction, transformation, and loading
- Process analysis
- Process improvement
- Process monitoring
- Corrective action enablement.

Data can be extracted and loaded incrementally into ABBYY Timeline as processes are executed so that monitoring and periodic analysis of processes can be performed more quickly, and for some use cases in real-time, rather than rebuilding the models from scratch each time.

Conformance checking in ABBYY Timeline centers around protocols (business rules), which can be anything from the amount of rework allowed and four-eyes principle to the time constraint between activities and SLAs.

ABBYY Timeline includes Bottleneck and Workflow, two built-in analyses for process improvement. The Bottleneck analysis is designed to find where time is being spent from a task or transitional perspective rather than duration, which is a total process perspective. Workflow analysis can help clients streamline manual business processes to make them more efficient and automating business processes.

ABBYY Timeline features a customizable dashboard with a grid-based designer interface that is intended for at-a-glance monitoring rather than for building a new analysis.

ABBYY Timeline includes Forecast analysis for making ML-based predictions of the future state of cases using past and present data.

ABBYY Timeline also includes an alert system to notify human workers or IT systems when a trigger occurs. Triggers can be configured through the UI against previously saved sets or a new query and support notification through email, SMS, or webhooks into another system.

As a standalone service, ABBYY Timeline is sold using a use-based pricing model. Price is calculated along two dimensions: the number of projects (typically synonymous with the number of processes) and data volume.

ABBYY's engagements related to Timeline are split 65/35 direct and through its partners. The company will continue to leverage its strategic partners with RPA vendors, e.g. Blue Prism and UiPath, to develop business initiatives jointly.

ABBYY sees its pipeline being driven 70/30 by automation and by ABBYY's traditional installed base. The company believes Timeline is ideally suited to address application areas in Financial Services, Healthcare, Insurance, RPA, and Supply Chain Management.



Financials

ABBYY does not release revenue information for Timeline but has stated that more than 50% of its deals are for standalone Timeline rather than bundled with other ABBYY products.

Strengths

- ETL with no-code data transformations designed for business users
- Wide array of built-in problem-centric analyses
- No-code custom KPIs designed for business users
- Corrective action enablement: predict the outcome of open cases, trigger notifications/automation.

Challenges

- Lack of capability to build custom analyses
- Lack of automated root cause analysis
- Lack of automated/manual what-if scenario simulation.

Strategic Direction

ABBYY is currently developing a solution it calls "Timeline for Capture" that combines Timeline capabilities with traditional BI metrics into a set of dashboards for managing and optimizing FlexiCapture and Vantage environments.

ABBYY plans to leverage its existing AI/ML IP to provide more automated process assessments in Timeline, including automated root cause analysis, next-best-action prescription, and scenario simulation.

In task mining, ABBYY plans to incorporate functionality for automatically discovering endpoints of tasks and contextual grouping of atomic steps into routines (e.g. logging into Salesforce or sending an email).

ABBYY is enhancing its dashboarding capabilities to provide functionality for real-time monitoring of operational metrics and allowing displays of interest to be marked and annotated to enable better collaboration within organizations.

The company is also developing industry-specific solutions and is currently targeting financial services, insurance, healthcare, and transportation and logistics.



Outlook

ABBYY Timeline offers a platform that is clearly designed with the business user in mind — with its no-code data transformations and custom KPI enabling business users to perform frictionless analyses. Additionally, its more than 20 built-in problem-centric analyses means users can dig in right away, without needing to build anything themselves. However, the platform does not offer users the option to build analyses if they want, and lacks many of the AI/ML features that many competitors already offer. The company recognizes the capabilities it lacks, as evident from its roadmap.

Additionally, the company's strategy to integrate unstructured document technologies from its other products will likely make Timeline a unique product.



Process Discovery & Mining Market Summary

Overview

Process discovery and process mining, previously two complementary segments, are converging as the market is recognizing the need to understand a more complete picture of how work is performed. Both segments aim to help organizations to gain visibility of processes but at different scales:

- Process discovery provides an understanding of work through the lens of workers on desktops. Human workers perform work that is rule-based on highly structured data or judgment-based on unstructured data, and the gamut in between. The segment is driven by both RPA and workforce optimization
- Process mining provides an understanding of work from an end-to-end perspective based on business outcomes. Process mining started from a narrow definition of visualization and analysis of event logs using algorithms and mathematical procedures. However, in recent years, it has grown to include capabilities for process modeling, process improvement, process monitoring, and corrective action enablement.

Process discovery vendors are integrating process mining technologies to help clients quantify the impact on work to give recommendations that will lead to greater overall business impact. Similarly, process mining vendors are integrating process discovery technologies to give actionable insights and to quantify the potential business impact of the insights reliably.

Process discovery & mining solutions typically feature:

- ETL capabilities to extract, transform, and load transactional data from IT systems for analysis
- Desktop capabilities includes a desktop tool to collect application data, environmental variables, and user interactions, and uses AI/ML to parse work from streams of recordings
- Conformance checking to understand how work is performed against organizational policies and best practices
- Root cause analysis to find factors that are contributing to certain process behaviors and outcomes
- Data simulation to simulate scenarios of process transformation and to understand potential impacts prior to making changes
- Workflow support to scaffold workflows to document work for regulatory compliance, triage work to appropriate workers, and facilitate bot-to-human, human-to-bot, and human-to-human collaborations.



Buy-Side Dynamics

The key capabilities sought by organizations in selecting a vendor for process discovery & mining solutions are:

- Ease of mapping end-to-end processes and improving transparency of operations
- Ability to reduce process cycle times and improve overall business outcomes
- Ability to identify root causes of process exceptions
- Ability to identify KPI impact of process variations
- Ability to identify process activities to be automated and their potential impact
- Increase the standardization of work and as a consequence, improve the auditability of operations for regulatory compliance, improve employee work quality and efficiency, and increase the impact and ease of deploying automation
- Reduce bot development/roll-out times.

Market Size & Growth

The current global PDM market size is estimated by NelsonHall at ~\$566.5m and will grow to ~\$5.4bn by 2024, a growth of 57% CAAGR. After slower than initially projected growth in 2020 revenues as the COVID-19 pandemic reduces spending in certain segments, clients are expected to return to higher levels of investment in improving processes in subsequent years.

Europe accounts for 56% of the PDM market, followed by the U.S. at 33% and APAC at 21%. The U.S. is expected to be the fastest-growing region despite the pandemic.

BFSI is the largest sector, accounting for 34% of the market. Prior to the global pandemic, the healthcare sector was expected to be fast-growing; however, that growth will likely be accelerated to become one of the fastest-growing sectors. As the cost of healthcare continues to grow in many countries, identifying processes to improve patient outcomes and reduce treatment waste will open up many opportunities.

Success Factors

The key success factors for process discovery & mining vendors include:

- Flexible pricing: successful vendors have flexible pricing with respect to data volumes, number of users, and platform functionality, to account for clients having differing requirements
- Ease of ETL capability: given the broad range of data systems used by clients, successful vendors not only have a broad range of pre-built connectors but will have also democratized their ETL capabilities so clients can tap into their data with ease
- Transparency into work: successful vendors have the capability to integrate data from multiple modalities that capture work; e.g. on the desktop, on mobile devices, and using IoT sensors, but also worker inputs; e.g. interviews, surveys, to give organizations a true picture of how work is performed within their operations
- Ease of understanding processes: successful vendors provide an array of analysis tools for clients to understand how work is performed quickly and its impact, but have also



- democratized these capabilities so even business users can develop tools and custom metrics to suit their organizational needs
- Outcome-driven insights: successful vendors provide actionable insights that cater to clients' organizational outcome goals
- Facilitate transformation: successful vendors look beyond the immediate assessment needs to enable clients to plan, execute, and track their process transformations, by providing capabilities that include understanding impacts of process changes, templating best practices, facilitating collaboration, and outcome-oriented monitoring.

Outlook

Over the next few years, expect the following developments:

- Integration of other data modalities. Just as user desktop data is giving richer insights, so too will other modalities used when work is performed on non-desktop devices (e.g. mobile, IoT) and non-traditional IT systems (e.g. conversational interfaces)
- Process discovery recorders will become two-way communication devices. Part of realizing
 the value of mining data is to get actionable insights, not just after the fact but as work is
 being performed improving best practice conformance, regulatory compliance, and for
 prescriptive training
- AI/ML capabilities will be able to give insights that are increasingly tailored to each client, with business policies, resource constraints, and client-specific KPI goals taken into account
- Greater DPA/RPA integration will lead to reduced bot roll-out times and quantifying the impact of bots on overall business outcomes
- Vendors will incentivize partners to share their industry and use case-specific tools across the platform by monetizing content stores
- Larger selection of unified one-stop-shop solutions using a combination of partnerships and M&As. Following activities observed in the past year with process mining vendors partnering with RPA vendors, most recently, Kryon announcing that Software AG will offer its process discovery technology, and ABBYY and UiPath acquiring TimelinePI and ProcessGold respectively.



NEAT Methodology for Process Discovery & Mining

NelsonHall's (vendor) Evaluation & Assessment Tool (NEAT) is a method by which strategic sourcing managers can evaluate outsourcing vendors and is part of NelsonHall's *Speed-to-Source* initiative. The NEAT tool sits at the front-end of the vendor screening process and consists of a two-axis model: assessing vendors against their 'ability to deliver immediate benefit' to buy-side organizations and their 'ability to meet client future requirements'. The latter axis is a pragmatic assessment of the vendor's ability to take clients on an innovation journey over the lifetime of their next contract.

The 'ability to deliver immediate benefit' assessment is based on the criteria shown in Exhibit 1, typically reflecting the current maturity of the vendor's offerings, delivery capability, benefits achievement on behalf of clients, and customer presence.

The 'ability to meet client future requirements' assessment is based on the criteria shown in Exhibit 2, and provides a measure of the extent to which the supplier is well-positioned to support the customer journey over the life of a contract. This includes criteria such as the level of partnership established with clients, the mechanisms in place to drive innovation, the level of investment in the service, and the financial stability of the vendor.

The vendors covered in NelsonHall NEAT projects are typically the leaders in their fields. However, within this context, the categorization of vendors within NelsonHall NEAT projects is as follows:

- **Leaders**: vendors that exhibit both a high ability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet client future requirements
- High Achievers: vendors that exhibit a high ability relative to their peers to deliver immediate benefit but have scope to enhance their ability to meet client future requirements
- **Innovators**: vendors that exhibit a high capability relative to their peers to meet client future requirements but have scope to enhance their ability to deliver immediate benefit
- Major Players: other significant vendors for this service type.

The scoring of the vendors is based on a combination of analyst assessment, principally around measurements of the ability to deliver immediate benefit; and feedback from interviewing of vendor clients, principally in support of measurements of levels of partnership and ability to meet future client requirements.

Note that, to ensure maximum value to buy-side users (typically strategic sourcing managers), vendor participation in NelsonHall NEAT evaluations is free of charge and all key vendors are invited to participate at the outset of the project.



Exhibit 1

'Ability to deliver immediate benefit': Assessment criteria

| Assessment Category | Assessment Criteria |
|---------------------|---|
| Offerings | Ease to aggregate logs into processes |
| | Range of pre-built connectors and APIs |
| | User desktop interaction recording capability |
| | Ability to identify desktop processes |
| | Ability to delineate agent time usage |
| | Integration between business data & desktop data |
| | Ability to filter based on process variation & grouping |
| | Range of pre-built process analyses |
| | ML-based root cause analysis |
| | Ease (UI-based) of conformance/compliance checking |
| | Proactive process intervention |
| | Dashboard functionality |
| | Ability to identify potential for automation |
| | Ability to automate bot creation |
| | Workflow support |
| | Scenario simulation |
| | Maturity of partner base |
| Delivery | PD pricing model available |
| | PM pricing model available |
| | Training |
| Client Presence | Overall PDM presence |
| | U.S. presence |
| | U.K. presence |
| | Continental Europe presence |
| | Rest of EMEA presence |
| | APAC presence |
| | LATAM presence |
| Benefits Achieved | Identification of processes to be automated |
| | Reduction in bot dev/roll-out times |
| | Impact on compliance |
| | Identification of root cause of process exceptions |
| | Time to identify process steps |
| | Reduction of variants |
| | Average cycle time reduced |
| | Identification of KPI impact of process variations |
| | Overall business impact |



Exhibit 2

'Ability to meet client future requirements': Assessment criteria

| Assessment Category | Assessment Criteria |
|---------------------|---|
| Service Culture | Perceived suitability to meet future client PDM needs Service culture |
| Level of Investment | Level of investment in PDM Level of investment in core desktop process discovery Level of investment in pre-built process analyses Level of investment in identifying & automating exception processing Level of investment in auto bot creation & proactive process intervention |

For more information on other NelsonHall NEAT evaluations, please contact the NelsonHall relationship manager listed below.



research.nelson-hall.com

Sales Enquiries

NelsonHall will be pleased to discuss how we can bring benefit to your organization. You can contact us via the following relationship manager: Guy Saunders at guy.saunders@nelson-hall.com

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