NEAT EVALUATION FOR MINIT:

Process Discovery & Mining

Market Segment: Process Mining Focus

Introduction

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

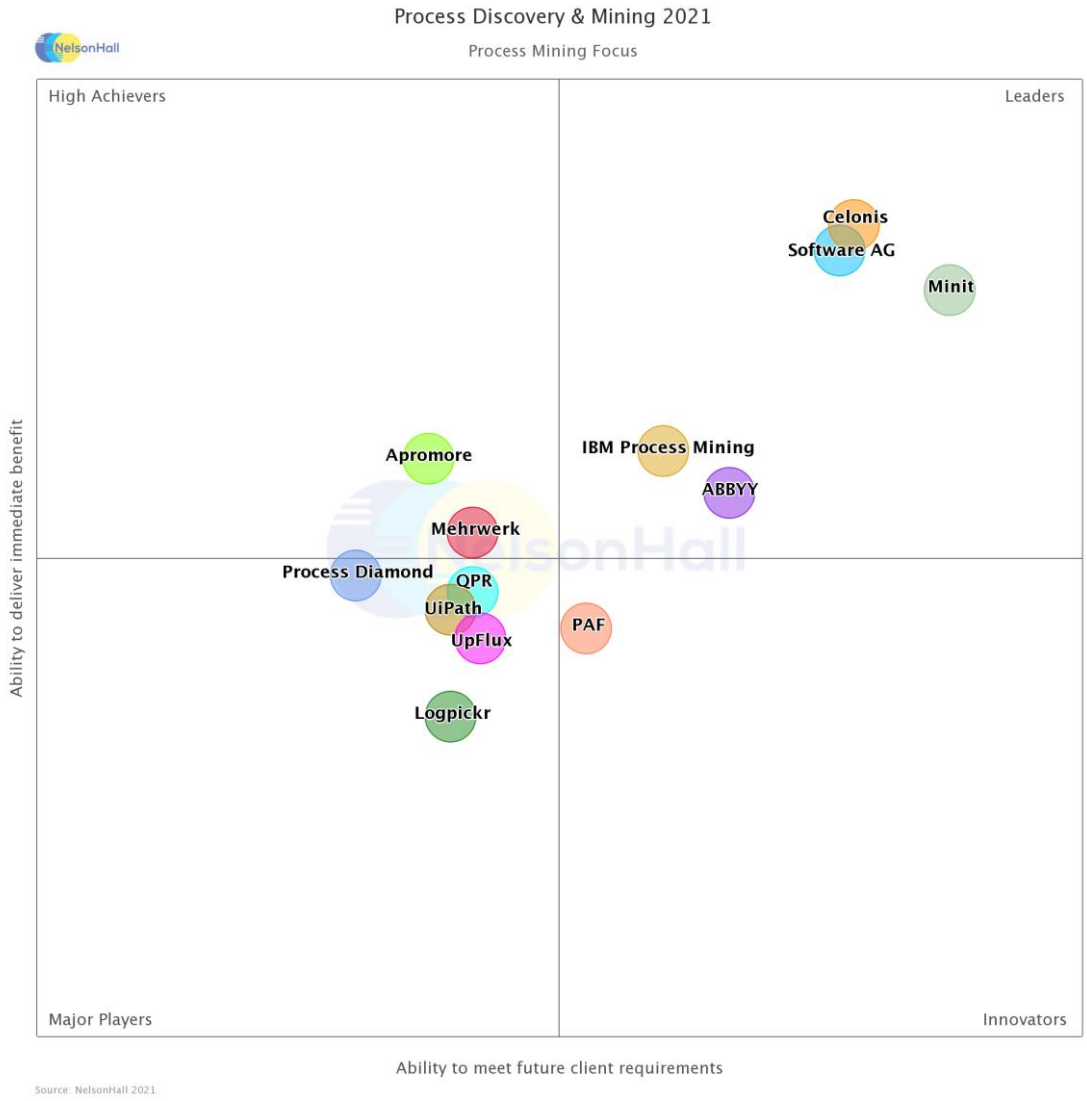
This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering process discovery & mining technology. The NEAT tool allows strategic sourcing managers to assess the capability of vendors across a range of criteria and business situations and identify the best performing vendors with dual focus on process discovery & mining, specific focus on process mining, focus on desktop process discovery, as well as the ability to plan and accelerate process change.

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, Apromore, Celonis, EdgeVerve, FortressIQ, IBM Process Mining, Kryon, Logpickr, Mehrwerk, Mehrwerk+NICE, Minit, Minit+EdgeVerve, PAF, Process Diamond, QPR, Skan, Software AG, Software AG+Kryon, Soroco, StereoLOGIC, UiPath, and UpFlux. *N.B. where two vendors have a go-to-market technology partnership, this is indicated by '+' between the vendor names*.

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

NEAT Evaluation: Process Discovery & Mining (Process Mining Focus)



NelsonHall has identified Minit as a Leader in the *Process Mining Focus* market segment, as shown in the NEAT graph. This market segment reflects Minit's ability to meet future client requirements as well as delivering immediate benefits to its clients with specific focus on enabling them to discover business processes from IT systems/transaction logs.

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 (*Process Mining Focus*) here.

Vendor Analysis Summary for Minit

Overview

Minit was founded in 2013 by Rasto Hlavac, who was CEO until May 2021, when he moved into the role of Chief Strategy Officer. The role is now filled by James Dening, who was previously SVP EMEA at H2O.ai and VP Europe for Automation Anywhere.

The company is headquartered in Amsterdam, Netherlands, with offices and entities in London, U.K., New York City, U.S., and Bratislava, Slovakia. The company employs ~100 employees globally, with its product development and R&D teams primarily based in Slovakia.

Minit's client base primarily consists of large enterprises ($1bn+ revenue), which makes up 85%, followed by 10% midmarket and 5% SMBs. Manufacturing is Minit's top industry vertical for process mining, followed by telecom & media. It also has significant traction in retail, BFSI, and energy & utilities. Minit directly engages with about 60% of its clients, while the remaining 40% come through its 40+ channel/consulting partners.

Minit is seeing the fastest revenue growth coming from the North American region. It previously raised €7m in 2019 in Series A funding led by Target Global.

Key Offerings

Minit offers Minit Process Mining, a process discovery & mining solution that aims to democratize process mining by enabling business users to understand their data and its insights easily through an easy-to-understand UI without becoming a process mining expert – reducing the time to value and training necessary. The company offers task mining capabilities through its partnerships with EdgeVerve and NICE. Minit Process Mining supports the company's vision of enabling everyone to explore the benefits of process mining for their organization.

Prebuilt packages target common use cases/processes, including continuous process improvement (e.g., P2P, O2C, Accounts Payable, Service Management), continuous process audit/compliance with business rule monitoring, digital transformation (e.g., cloud migration of SAP, Oracle systems), and RPA/automation.

Minit Process Mining includes prebuilt connectors to extracting, transforming, and loading data from common business systems. Data transformation capabilities are provided as part of its prebuilt connectors. Specifically, Minit provides data validation during the import of a dataset – initially on a subset of data (Quick Validation) but also on the whole dataset. It is also possible to join and transform a subset of data sources using SQL syntax.

Minit does not have its own native desktop recording capability but works with multiple vendors for task mining data. It has integration with EdgeVerve AssistEdge Discover, where clients can purchase the capability as an add-on module. The integration between the data collected by AssistEdge Discover and event logs is handled by Minit.

Minit Process Mining supports what the company has termed Hierarchical Process Mining – a Process Map can be adjusted to the desired focus level by drilling down deeper or zooming out as necessary. When desktop task data is loaded and linked with business data, desktop task steps are displayed using Hierarchical Maps at a deeper level to the typical business process activities.

Minit Process Mining includes rework detection within process maps to determine the rework scale, consisting of loops (complex rework over multiple activities) and self-loops (rework within the same activity).

The solution is capable of checking compliance of case performances against business rules, in addition to checking conformance against reference process models. Business rules can be based on case or event attributes and any metrics (standard or custom). Each rule can be configured with up to three categories (OK, Warning, Error), which will show an icon on the process map to evaluate violations at a glance.

It also includes automated root cause analysis functionality to find the key influencers to clients' process questions, e.g., why some cases get stuck in rework or why some cases are slower. Its AI-Powered Root Cause Analysis uses machine learning to compute the combination of selectable case attributes (root causes) that negatively influence a selected metric.

Minit Process Mining also includes BPMN-based what-if analysis that enables clients to understand possible performance and cost impacts of proposed process changes before making significant investments. It uses historical data to populate initial parameters, e.g., gateway probabilities and resource quantities, for simulating data. Some data needs to be entered manually, e.g., process activity cost.

Minit leverages the Qlik engine to deliver the BI part of dashboarding capabilities within Minit Process Mining aimed at business users (citizen analysts). Dashboards can embed process mining components (e.g., process flows, variant analysis, and rework analysis) alongside traditional BI components for seamless integration between the two.

Minit's pricing model is based on named user subscription licenses, with two types of users: Analyst and Business. There are no limitations based on the number of processes or the amount of data ingested. It offers standard solution packages that can be combined as bespoke packages (with volume discounts) for different implementations to match client needs.

Financials

Minit does not release revenue information but has stated that revenues grew by three to four times in the last nine months. North America is its fastest-growing region.

Strengths

- 360-degree process view of both Process Mining and Task Mining (using partner technology)
- Metric-based Root Cause Analysis: finds top influencers (from subset of case attributes) to negative impact of a chosen standard metric
- Custom metrics are well integrated across functionality, from Process Maps and Automation Potential to Root Cause Analysis (coming v5.5)
- Deep integration with Qlik, including Qlik Cognitive Engine.

Challenges

- Lack of capability to suggest solutions to root causes (this is in the roadmap)
- Lack of native predictive analytic capabilities for intervening in at-risk open cases (also in the roadmap).

Strategic Direction

Minit's product investments over the next 12-18 months focus around streamlining and democratizing process analysis capabilities, automating process analysis to reduce time-to-value, and deeper insights and change recommendations using AI/ML.

The roadmap for upcoming releases include the following features:

Version 5.5 (next release)

- Connectors for Amazon Athena, Apache Hive, Databricks, and Snowflake to enable clients to tap into emerging data sources like data lakes and lakehouses
- Root cause analysis v2: moving from determining root causes for standard process metrics, e.g., lead times, cycle times, and SLAs, to determining root causes for custom metrics created by clients
- Flexible Data: decoupling data models (data import/refresh and type switching) from process analyses to ease reuse and sharing.

Version 5.6

- Business alerts & actions: alerts/notifications and triggers for when business rules are violated either through APIs or integrations to third-party workflow or execution engines. This release will focus on manual rules published by Minit or created by clients
- AI-powered simulation: enhancing its simulation capability to go beyond statistical and probabilistic modeling by leveraging machine learning.

Later 2021/early 2022

- Expansion of custom metrics & business rules: growing library of operators that users can build metrics and rules from
- AI-powered predictive analytics: moving beyond manual business rules with predictive capabilities for data-driven rules and mitigating future risk and process inefficiencies
- AI-powered prescriptive analytics: change recommendation for process improvements
- Use case project repository: an online store of use case accelerators, where clients need to plug in their data sources. It builds on the flexible data introduced in v5.5.

Outlook

Minit Process Mining offers a solution for end-to-end process understanding that includes traditional transaction logs, desktop data, and automation platforms. It offers an easy-to-use and intuitive UI that democratize its capabilities to non-technical users, especially building data models. Its Hierarchical Process Mining provides added value by allowing multiple layers of abstraction to enable clients to understand their business processes at the right level of detail for them.

It lacks predictive analytics for correcting at-risk open cases that many other vendors offer, but this is on the company's roadmap for late 2021/early 2022. It also plans to release AI features beyond the statistical analysis of historical process data using machine learning that, on the surface, keeps it at pace with its competitors, but will likely be easier and more intuitive to use than others.

It was good to hear about Minit's strategic partnership with EdgeVerve to deliver a 360-degree process view. The integration between the two is rather shallow – requiring users to export the data from AssistEdge Discover and import it into Minit Process Mining (either manually or setting up a batch process). Currently, the desktop data is being used to enhance the Process Map in Minit Process Mining and identify RPA candidates, but the two companies are working on delivering insights that can only be had from the combined business and desktop data types.

Process Discovery & Mining Market Summary

Overview

The convergence of process discovery and process mining accelerated in 2020/21 as the market recognized the need to combine their strengths to overcome their challenges – not all work is done within IT systems and not all work is done on desktops.

Both segments aim to help organizations to gain process understanding but from different perspectives:

- *Process discovery* (end-to-end task mining) provides an understanding of work execution through the lens of workers on desktops. It captures all work performed on desktops, including that done outside of IT systems, e.g., Excel, Outlook, Notepad, etc. The segment is traditionally driven by desktop automation and workforce optimization
- *Process mining* provides an understanding of work from an end-to-end perspective through to the final business outcome. Process mining started from a narrow definition of visualization and analysis of event logs from IT systems using algorithms and mathematical procedures. The sole reliance on IT system logs means work performed outside of them is not captured.

Process discovery vendors are integrating process mining technologies to help clients quantify the impact on work to give recommendations that will lead to more significant overall business impact. Similarly, process mining vendors are integrating process discovery technologies to fill in the gaps in IT system logs to provide more reliable and actionable insights with quantification of the potential business impact.

Process discovery & mining solutions typically feature:

- *Connector capabilities* – to extract, transform, and load transactional data from IT systems for analysis and integration to third-party platforms for enabling automation and proactive interventions
- *Desktop capabilities* – to collect streams of desktop work that includes 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 before making changes
- *Proactive intervention* – leveraging ML and heuristics to trigger automations (workflows and RPA bots) and real-time process guidance on desktops.

Buy-Side Dynamics

Benefits sought (ordered by importance) by buyers for engaging a vendor for process discovery & mining are:

- Improve overall visibility and transparency of process flows
- Reduce average process cycle times
- Reduce effort to identify process steps and variations
- Improve identification of root causes in process variations, outcomes, non-compliance
- Improve identification of KPI impact in process variations, outcomes, non-compliance
- Improve identification of processes to be automated
- Improve upskilling or retraining efforts with precision training for individuals or teams
- Improve business agility.

Key inhibitors for buyers looking to adopt process discovery & mining solutions relate to stakeholder buy-in, data, and privacy.

Market Size & Growth

The current global PDM market size is estimated by NelsonHall at ~$670m and will grow to ~$4.3bn by 2025, a growth of 45% CAAGR.

Europe accounts for 43.3% of the PDM market, followed by North America at 42.5% and APAC at 9.7%. Strong growth in North America will cause it to overtake Europe by 2025.

BFSI is the largest sector, accounting for 28.7% of the market. The ongoing impact of the pandemic on global supply chains has boosted adoption in transport/logistics and manufacturing that will continue through 2025. Similarly, healthcare (having been a top growing sector in 2020) will continue to grow due to continued rising costs and deficiencies exacerbated by the pandemic.

Success Factors

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

- *Actionable insights*: providing insights that drive impactful changes with just enough information without overwhelming users. This is also not limited to historical data but ongoing data using predictive analytics to intervene in open cases
- *Adaptive and transparent pricing*: offering flexible pricing for organizations to adjust to current and changing needs. At the same time, pricing is transparent so clients can predict how costs will change to budget accordingly
- *Balancing flexibility and ease of use*: some vendors have designed UI/UX with customizability and flexibility in mind. However, during that process, it has become overwhelming and less intuitive to use. Successful vendors are using design thinking to build their platform with the right balance to improve user-friendliness
- *Data governance at scale*: architecting their platforms with organization and process data governance in mind. When scaling adoption from a single business unit to multiple ones

in the same company, platforms need to be designed to handle the increased complexities of data and process ownership

- *Empowering partners*: recognizing they are first and foremost software companies rather than domain experts, these vendors are frequently going hand-in-hand with partners into client engagements so they can speak the same language. They also develop programs to work with partners across geographies and industry verticals
- *Enabling transformations*: going beyond the immediate mapping and assessment needs of clients and enabling them to plan, execute, and monitor process transformations. Provide capabilities to support building business cases with insights on the impact of process changes, standardizing work by templating best practices, generating bots to accelerate their rollout, and knowledge sharing for cooperation and collaboration.

Outlook

Over the next few years:

- Drivers for continued deployment will include continuous or iterative improvement efforts and to improve outcomes of connected processes that support the initial key processes
- Solutions will fully integrate not only business and desktop data but increasingly include additional data modalities like IoT to enable planning process changes with more actionable and impactful insights and to accelerate implementations of process changes
- Machine learning will play a more significant role in enabling the planning of process changes in addition to the current trend of enabling implementation efforts with predictive and prescriptive analytics
- Healthcare will continue being one of the strongest growing sectors, outpaced only by the adoption rate of the transportation and logistics sector
- Process discovery & mining deployments will become 80% cloud-based, with an increasing number of vendors offering PDM-as-a-Service and freemium options to build their client base as part of a land-and-expand strategy.

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 Desktop process discovery capability Integration between business and desktop data Process visualization Range of prebuilt/templated process analyses Ease (UI-based) of conformance/compliance checking ML-based root cause analysis Recommendations for process improvement and re-engineering Proactive process intervention Integrated automation capabilities Analytics reporting and insights No/low-code development
Delivery Capability	Maturity of partner base Desktop process discovery pricing model available Process mining pricing model available Training
Client Presence	Overall PDM presence North American presence LATAM presence Europe presence MEA presence APAC presence
Benefits Achieved	Visibility and transparency of process flows Reduced effort to identify process steps and variations Identify root causes of process variations and outcomes Identify KPI impact of process variations and outcomes Reduced average process cycle times Identify process activities to be automated Upskilling or retraining efforts Business agility Overall business impact

Exhibit 2

'Ability to meet client future requirements': Assessment criteria

Assessment Category	Assessment Criteria
Level of Investments	Level of investment in PDM
	Level of investment in core desktop process discovery
	Level of investment in data connectors, integration, and models
	Level of investment in prebuilt (templated) process analyses
	Level of investment in analytics, insights, and simulations
	Level of investment in accelerating automation development
	Level of investment in proactive process intervention

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