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The Evolution of Process Mining: Game-changing Innovations and Future Outlook

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Introduction

Enterprises are facing multiple headwinds – high inflation, supply chain disruptions, a looming recession, and talent shortage. Additionally, competition has intensified, and customer expectations are evolving rapidly. As the complexities in running a successful and competitive business surge, enterprises are realizing the need to transform their processes to drive efficiencies and performance at scale.

Several enterprises have embarked on a journey to adopt new technologies to enhance their business processes; however, most of them have failed to achieve the desired results from their investments. The lack of as-is process visibility is a key challenge that inhibits enterprises from truly transforming their businesses and achieving operational excellence.

Historically, to achieve transformation, enterprises relied on manual methods to understand process inefficiencies. But such methods are time-consuming and error-prone, as they rely on opinions, human subjectivity, and biases rather than actual data. In recent years, process mining has emerged as the strongest addition to enterprises' technology arsenals to better understand and improve business processes.

At the same time, enterprises are slowly realizing the potential of process mining to be much more than a tool. In fact, process mining is becoming the starting point for transformation and a vital feedback mechanism to drive continuous improvements within enterprises. Notably, process mining is fast becoming the foundation for business management and business transformations.

Process mining's numerous benefits have spurred its adoption among enterprises; however, challenges related to data availability, data transformation complexity, and the lack of solution awareness are hindering its widespread adoption. There is a clear need to enhance the capabilities of process mining solutions to expand their use to business users without depending on data engineers and enterprise IT. Advanced process discovery and enhancement features and business consumer-grade user experience could facilitate adoption among business executives and operational managers and aid strategic decision-making. These sophisticated capabilities will enable enterprises to adopt process mining more quickly, across more use cases, expedite RoI, and realize greater value.

In this viewpoint, we:

- Introduce process mining
- Explore the current state of the market and the growing need for process mining
- Examine the key challenges that enterprises face in adopting and scaling process mining
- Detail the innovative capabilities that define the future of process mining and enable sustainable adoption

The report will benefit

- Executives responsible for optimizing business processes
- Chief Operating Officers and other business leads charged with improving operations
- Digital transformation and automation leaders

Understanding process mining

Process mining refers to a technology that can:

- Collect event log data from different enterprise systems, such as Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM), which contain enterprises' digital footprints and process-related information, such as date, time, user, and activity (which are analyzed further)
- Generate process maps capturing different process variants and the sequence of the steps involved
- Extract relevant business insights, such as process discovery, benchmarking, process conformance checks, process monitoring, and cross-process understanding

Process mining blends the power of data-based analysis techniques – including data mining, sequence mining, clustering, association rules mining, and Machine Learning (ML) – to help organizations discover as-is processes and identify process optimization/automation opportunities. The solution adds significant value to traditional process analysis techniques, which rely solely on process owners' knowledge and experience in discovering and understanding processes. It helps build a healthy transformation pipeline via a fact-based approach, with limited reliance on human bias and opinions. It is technology-driven, easy to scale, and provides faster time-to-value. It also provides greater depth and breadth of information, thereby facilitating operational transparency.

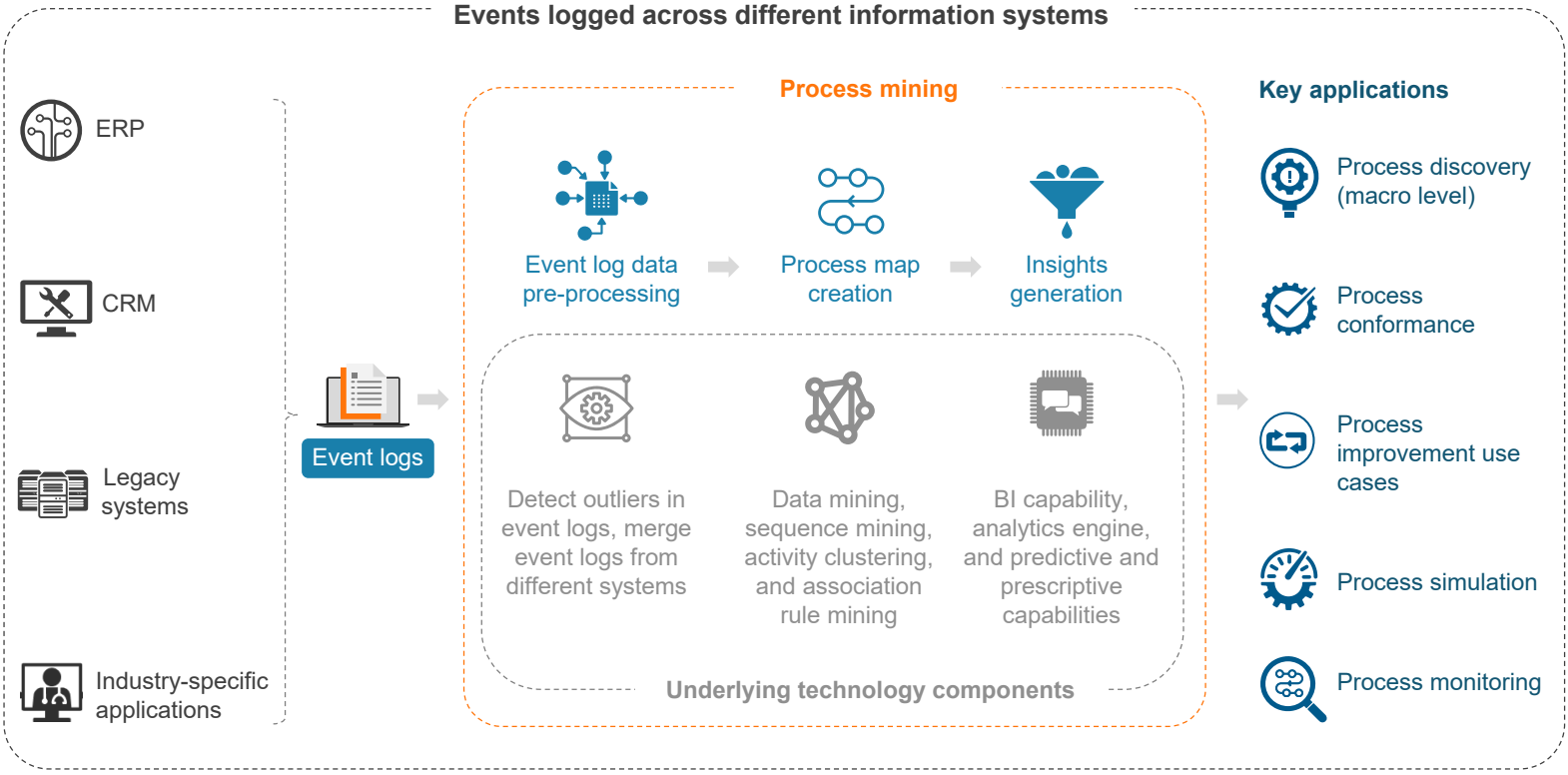
Enterprises initially started with time and motion studies that aimed to standardize and optimize manufacturing processes. Over time, businesses sought to streamline processes to avoid wasting time, money, and resources. Thereby, they started adopting techniques such as lean manufacturing, six sigma, and agile manufacturing. While all these techniques focused on eliminating process inefficiencies, they involved significant manual effort and could not leverage actual process data to discover as-is processes and drive continuous improvement. This led to the need for a technology that can analyze the as-is process data and offer a fact-based approach to discover and improve business processes, with clear value that can be attributed to a company's balance sheet.

Exhibit 1 illustrates the architecture of the process mining solution.

EXHIBIT 1

The process mining architecture

Source: Everest Group (2022)



Over the last few years, process mining witnessed significant enterprise adoption as they started to understand the benefits of this technology. Organizations leveraged it to discover processes, check conformance, identify bottlenecks, and monitor processes in a continuous way. Previously, process mining was considered a technology for process discovery and conformance checking. Today, there is a greater need to make process mining available to the masses (consumer-grade UI) and increased value is waiting to be unlocked by democratizing the intelligence of process mining across platforms and tools people already know and use.

Initially, enterprises leveraged process mining solutions to understand a single process in detail. But there are many interconnected processes across organizations that can impact each other. Thus, there is an urgent need to perform cross-process analyses and uncover hidden inefficiencies at the intersection of these cross-functional processes to drive improvements across the organization.

Additionally, the need to enhance the ease of use and provide an enterprise-grade experience is becoming critical to drive organization-wide adoption of the process mining technology.

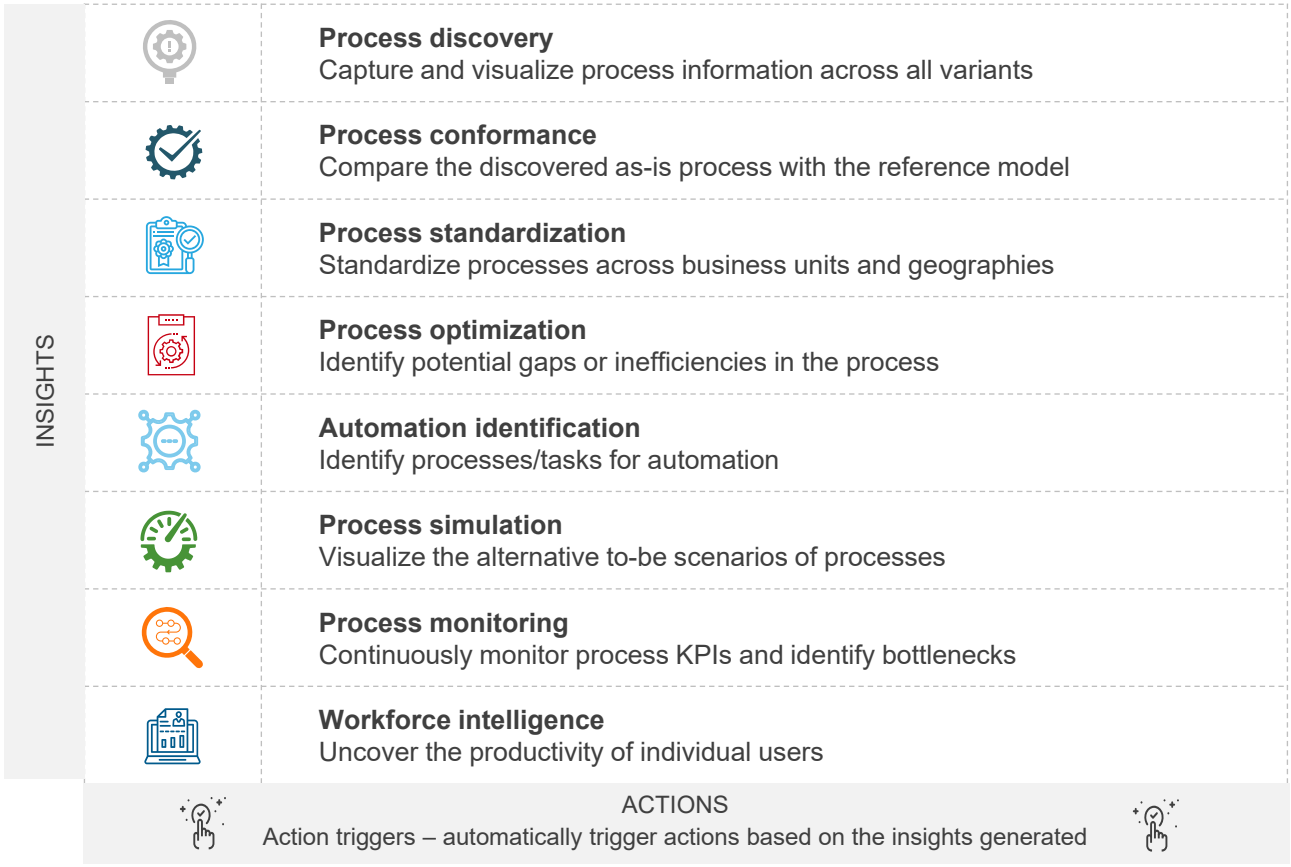
Applications of process mining

Process mining solutions have a wide range of applications in generating fact-based insights and helping organizations take corrective actions to improve business processes, as Exhibit 2 illustrates.

EXHIBIT 2

Process mining applications

Source: Everest Group (2022)



In essence, process mining is emerging as an integral component of the intelligent automation ecosystem, and we expect greater adoption of this technology going forward.

The growing need for process mining

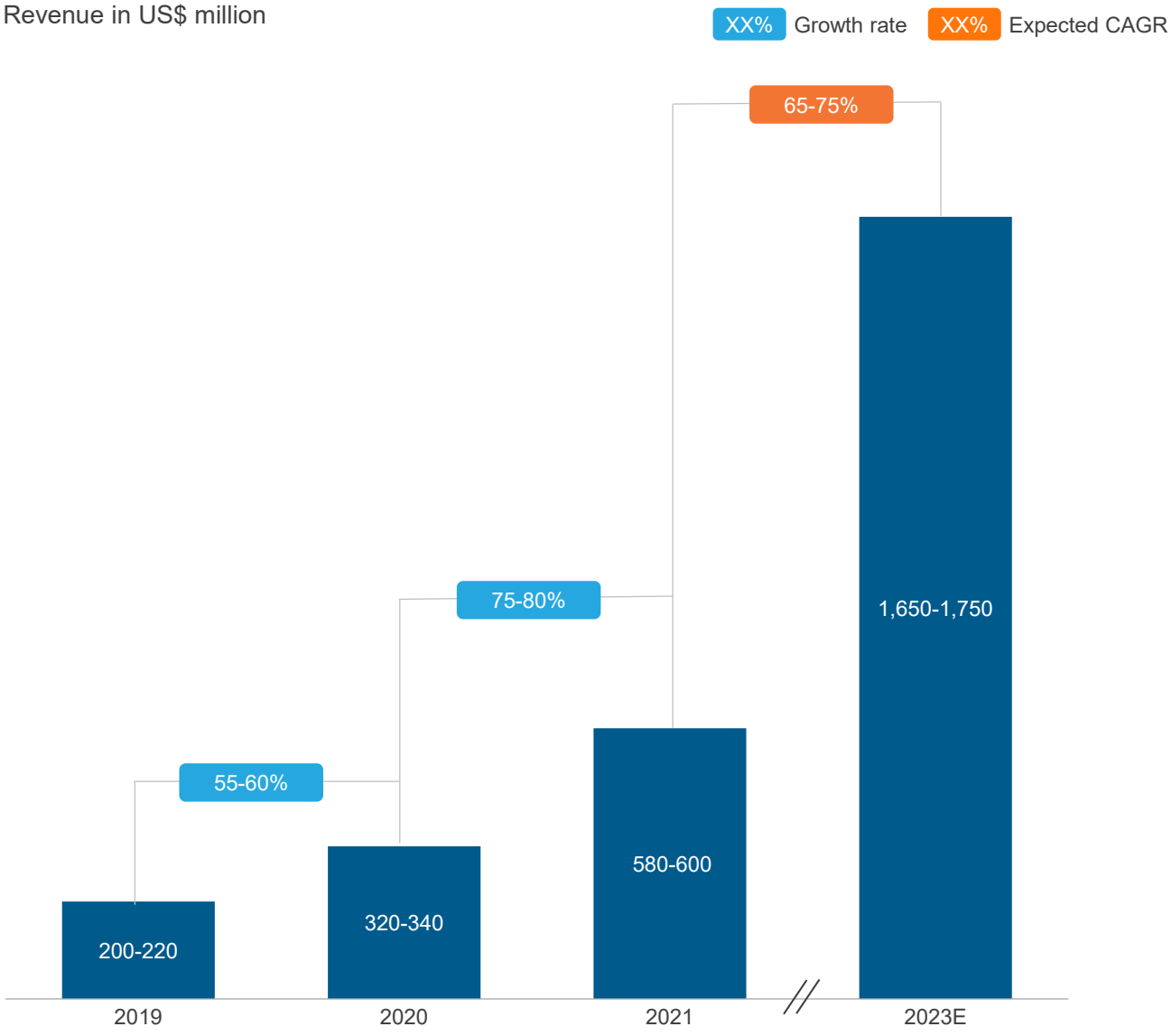
Overview of process mining software market size

Enterprises are rapidly embracing process mining, with the process mining software license market growing by 75-80% over 2020-21 (see Exhibit 3). The market was valued at US$580-600 million in 2021 and is expected to grow at a significant pace over the coming years, driven by the increasing need for enterprises to accelerate their digital transformation initiatives and achieve operational excellence.

EXHIBIT 3

Process mining software market size

Source: Everest Group (2022)



Overview of process mining software market size

Enterprises are quickly adopting process mining because of its potential to deliver positive cost, operational, and strategic outcomes, as described below:

Cost impact

Cost impact refers to direct cost savings, improved Full-Time Equivalent (FTE) capacity, and increased number of automated hours

- Benefit over manual techniques: Process mining can significantly reduce the effort required from process excellence and business teams involved in manual process discovery techniques
- Benefit due to optimization: Process mining solutions offer cost savings since they optimize/automate processes and efficiently use resources/FTEs through the insights generated

Operational impact

Operational impact refers to outcomes that go beyond direct cost savings and focus on higher employee productivity, improved operational efficiency and quality, and better governance and compliance.

- Operations optimization: Enterprises can leverage process mining to detect anomalies and rework cycles hindering overall efficiencies. They can also monitor and optimize processes in near real-time by assessing their impact on different KPIs and custom metrics
- Improved governance and compliance: Enterprises can leverage process mining for a fact-based and automated approach to conduct compliance checks efficiently
- Scaling of automation initiatives: Organizations can identify and prioritize automation processes/tasks by discovering and analyzing factors such as automation potential, frequency, and expected RoI

Strategic impact

Strategic impact refers to higher order outcomes focused on revenue growth, business continuity, better customer and employee experience, sustainability, and overall digital transformation.

- Top-line growth: Process mining can be leveraged to extract hidden process insights, which can uncover new cross-sell/upsell opportunities or better ways to conduct business, impacting top-line growth
- Enhanced customer experience: Using process mining to discover and assess customer journeys can help organizations identify customer pain points and eliminate any gaps in processes to improve customer experience
- Accelerated digital transformation: Enterprises can leverage process mining to support various stages of digital transformation, such as discovery, creation of a healthy transformation pipeline, and progress monitoring, thereby improving RoI, time-to-market, and scalability
- Driving ESG initiatives: Enterprises can also use process mining to gain insights on the carbon emissions attributed to process steps and continuously monitor the impact of any corrective actions they take

Strategic drivers such as ESG that involve measuring and optimizing aspects such as supplier diversity, customer satisfaction, and business practices are becoming vital for organizational success. Process mining facilitates transparency across the value chain – right from a company's R&D to production, procurement, and distribution. The insights from process mining can help enterprises deliver on their ESG agendas by providing visibility and uncovering improvement opportunities in business processes.

The objectives driving process mining adoption vary across enterprises and can range from cost savings to improved governance to top-line and green-line (or ESG-driven) growth. Presently, the top enterprises drivers for adoption are:

- The need to optimize operations
- Traditional factors such as cost savings, improved governance, and compliance
- The need for automation / digital transformation initiatives, which help build a healthy transformation pipeline of opportunities
- Business impact, including the mandate to meet sustainability goals

Exhibit 4 rates the key factors driving process mining adoption among enterprises on a scale of 1 to 7, with 7 denoting the most compelling factor.

EXHIBIT 4

Key factors driving process mining adoption

Source: Everest Group (2022)

Overall driver satisfaction 5.6

Impact dimensions	Key business objectives / adoption drivers	Driver relevance on a scale of 1 to 7
Cost impact	Saving costs	5.8
Operational impact	Scaling automation initiatives	5.1
	Optimizing operations	6.2
	Improving process governance and compliance	5.9
	Increasing employee productivity	5.2
Strategic impact	Accelerating digital transformation	5.0
	Enhancing customer experience	4.9
	Improving top-line growth	4.4

Sample: Based on feedback collected from 55+ enterprise buyers

Challenges that enterprises face in adopting and scaling process mining initiatives

While there is increased enterprise interest in and accelerated adoption of process mining, organizations face several challenges in scaling process mining adoption and deriving the desired value from their investments. The key challenges to adoption are described below.

Lack of solution awareness

Given process mining's roots in academic research, organizations continue to lack awareness of its relevance and value in an enterprise environment. They also struggle with the lack of stakeholder buy-in due to limited understanding of process mining technologies, applications, and benefits. Further, apprehensions over a new solution's credibility make it difficult to build the business case for large-scale, organization-wide adoption.

Limited availability of quality data

It is difficult to find sufficient event logs data for discovery and analysis, especially in industries and geographies with relatively low penetration of information systems such as ERP and CRM. Additionally, many activities are still done manually or outside of systems that generate logs, making it difficult to get a complete picture of activities through process mining. Even if information systems are available, enterprises may not have saved historical data, which limits data availability.

Challenges in data transformation

Limitations in handling data at scale is a key inhibitor for enterprises in leveraging process mining to derive meaningful and actionable insights. Organizations have multiple business processes running at any point and to obtain a complete picture, they must analyze the data generated by the actions performed at the intersections of these processes. Cleaning and updating such vast amounts of data – including extracting event logs and data in the right format, especially from non-standard IT systems – can be a herculean task for enterprises. The lack of pre-built connectors (especially for industry-specific or custom applications) and the need for significant support from enterprise IT and data scientists to clean and transform data into appropriate formats is slowing the pace of process mining adoption.

Increasing complexity across interconnected processes

Many business processes that run across an organization are linked with one another. Most inefficiencies lie at the intersections of these cross-team/departmental processes; however, it is extremely difficult for enterprises to visualize these interconnected processes via a single view due to the limited sophistication of the currently available process mining solutions. Thus, enterprises might find it difficult to expand the use and scale of process mining adoption.

Security and compliance risks

Process mining solutions require access to event-logs data and, amid increasing security concerns, obtaining approvals from enterprise IT to access data can be a challenging task. Enterprises in regulated industries such as Banking, Financial Services, and Insurance (BFSI), healthcare and pharma, and telecom are highly concerned about data privacy and security, especially customers' personal data. Such concerns pose a challenge in scaling up process mining adoption.

Internal resistance

Last, employees could resist the adoption of process mining due to the increased transparency it brings into how the work is done. The visibility that process mining provides is a cultural shift, driving changes in employees' ways of working. Business silos and the underlying incentive structures could make it difficult to manage this change. Organizations would do well to focus on change management to overcome any resistance and drive acceptance among employees.

These challenges make it difficult for enterprises to adopt process mining. The complexity of the user interface can also limit adoption among business users. However, with the technology's growing sophistication, some process mining providers are offering capabilities to address these challenges and ease adoption. These advanced capabilities make it easier to adopt and derive superior value from process mining.

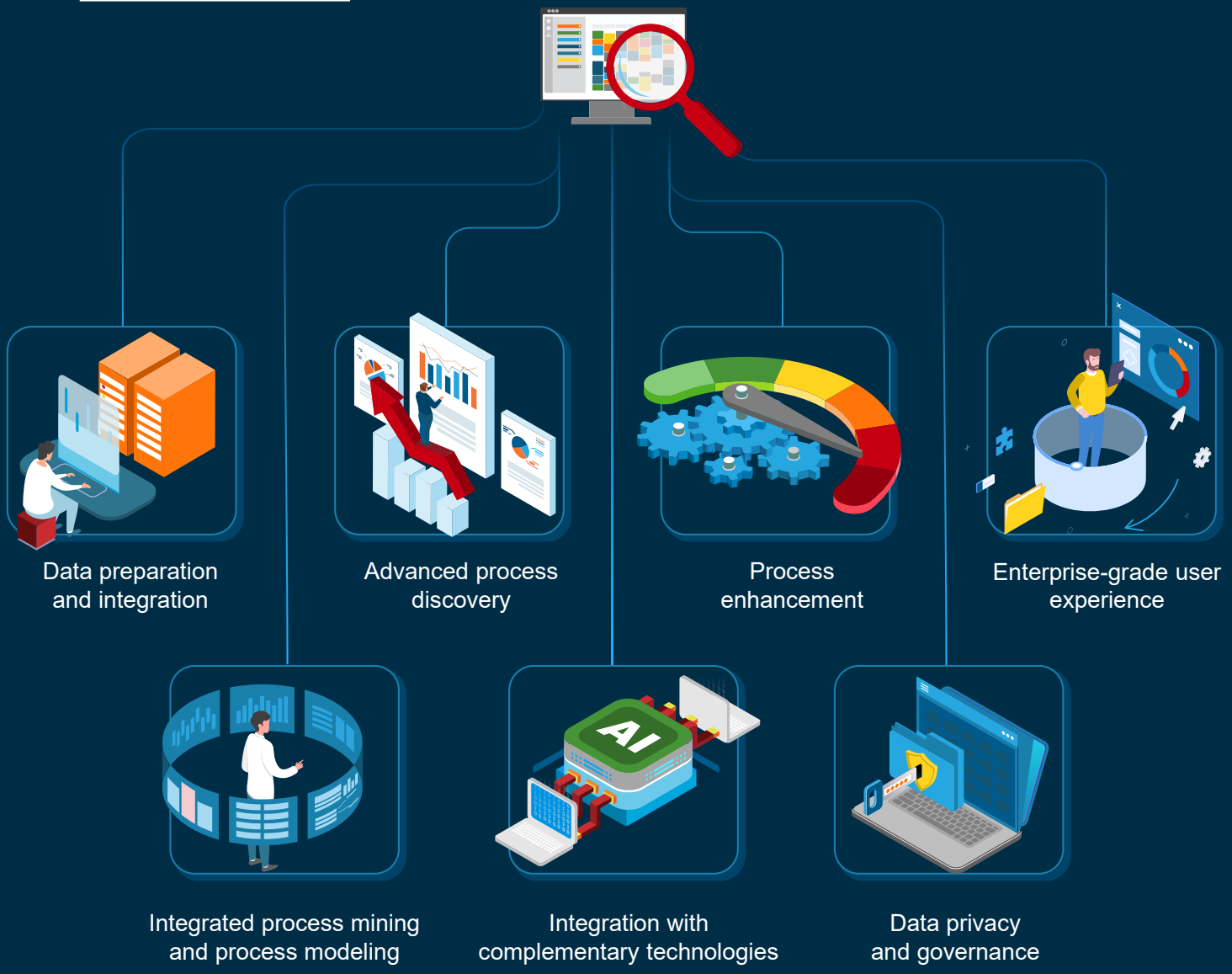
In the next section, we take a look at the key innovative capabilities expected to accelerate the sustainable adoption of process mining across an enterprise.

Innovative capabilities that define the future of process mining

Process mining providers are investing heavily in enhancing their offerings and adding innovative capabilities – ranging from near real-time data streaming, object-based discovery, predictive monitoring, user collaboration to share process intelligence insights, enterprise-grade user experience, and process enhancement features such as AI-based simulation analysis – to address enterprise challenges. Enterprises need to consider these capabilities when evaluating process mining solutions to maximize the RoI from their investments.

Mission critical elements of process mining

Source: Everest Group (2022)



The key innovative capabilities that are expected to play a vital role in the evolution of process mining technology and expand its use from projects to more continuous and organization-wide initiatives are described below.

Integration with enterprise systems and data preparation capabilities

Enterprise digital footprints are captured in system logs, and process mining leverages these logs as a source of data to discover as-is processes. Dealing with huge data volumes and transforming the data into formats that process mining solutions can use is a daunting task for enterprises, especially as they try to reduce their reliance on enterprise IT. The key capabilities required to improve data scalability and enhance the ease of data transformation are:

Pre-built connectors

Process mining technology providers are building pre-built connectors for standard enterprise systems, such as SAP, Oracle, ServiceNow, and Salesforce. They are also creating system- and process-specific connectors such as SAP connectors for Order-to-Cash (O2C) and Procure-to-Pay (P2P) processes. To enable the discovery of end-to-end processes, there is a need to provide connectors for custom applications such as Coupa in the finance function, Guidewire in the insurance industry, Sage in the F&A function, and Zendesk in the HR function.

These connectors would help enterprises establish robust connectivity with the data source and help stream and ingest event-logs data in near real-time.

Guided data clean-up

Another key aspect is the ease of feeding the data into the software, especially for business analysts with limited/no data science knowledge. Guided data clean-up provides an easier way to load the data and expedites data transformation as compared with the traditional approach. It guides users on how to cleanse and transform the data step by step. Such guidance is vital in cases involving multiple processes, in which data flow can be complex. With a guided clean-up and upload capability, users can manage the data flow in a sequential manner.

This capability addresses the data transformation challenges that enterprises face when scaling process mining across different processes in the organization. It also enables enterprises to determine the scope of process analysis and quickly obtain insights when handling large data volumes. These advantages can enable on-the-ground employees who may not possess data science-related knowledge to use process mining.

Guided data clean-up provides an easier way to load the data and expedites data transformation as compared with the traditional approach

Advanced process discovery features

Process discovery is the most basic application of process mining solutions that provides a visual view of as-is processes based on the log data. Some of the advanced capabilities needed to deliver a

complete and holistic view of as-is processes are:

Object-based discovery

Traditional process data models used for process mining, tend to consider cases in isolation. However, real-life processes can consist of events that are related to multiple objects (for example, an order delivery process may comprise associated objects, such as items/products and consumers).

For example, in a manufacturing company's supply chain, production and deliveries of orders are highly dependent on procurement and inventory for material availability. Answering questions about throughput times, dependencies, and parallel activities across processes requires the harmonized analysis of the many process objects involved in one-to-many and many-to-one relationships (materials, POs, deliveries, orders, order items, invoices, etc.). With traditional process data models, this is challenging to do quickly and without increased complexity and risk of data fidelity.

The event log that consists of case ID, timestamp, and attributes can be better analyzed by identifying the underlying objects and establishing object-based relationships. The object-based process discovery approach analyzes data with several one-to-many and many-to-many relationships and helps visualize and understand such complex real-life business processes.

There are multiple different objects involved in the end-to-end process, and this requires enterprises to look at the process in an expansive view. An object-based approach helps shift from a 2D to 3D visualization of the process. It can capture real-life objects and events in the way process owners describe them. This provides enterprises with an end-to-end process view for identifying any hidden inefficiencies within and between end-to-end business processes. With this view common business questions like the ones listed below become very easy to answer:

- How often did the event <Create Sales Order> happen and how many <Sales Orders> and <Sales Order Items> have been involved?
- How many <Sales Orders> have no shipment and what caused this?
- What does the <Sales Order> process with more than 5 <Shipments> look like? Is there a difference between those with only one shipment in throughput time?

Discovery of interconnected processes and parallel behavior detection

While most solutions can discover processes involving a single or a few different systems, the discovery of interconnected processes is still a challenge. It involves connecting events from different processes and displaying all interconnected processes spanning the many departments across an organization in a single visual view.

A key challenge in mining interconnected processes is detecting parallel behavior, which means understanding multiple activities that can happen simultaneously across processes and not considering them as different variants. Discovering interconnected processes, along with detecting parallel behavior, helps enterprises analyze the interdependencies or pain points in a process in one business unit that might be impacting a different process in another business unit.

Collaboration features for non-technical users to share insights

Providing avenues to collaborate and share insights is vital to helping enterprises transform insights into action. A built-in feature that allows users to share dashboards/analysis within the platform, or pre-built integration with messaging tools such as Microsoft Teams and Slack, can significantly improve user collaboration. The ability to tag users on the platform can enable teams to collaborate seamlessly

within the process workspace. A natural language Q&A-based discovery that allows exploration based on the most common curated questions about process health and inefficiencies, would eliminate barriers for non-technical users to start deriving relevant insights from process mining and collaborate better. Additionally, an embedded chat interface within the platform can further enhance collaboration in terms of sharing insights and aligning on corrective actions. Some process mining solutions offer out-of-the-box features to export dashboards and process insights in presentation formats such as PPT and PDF, making it easy to share/present insights to an executive audience.

Process enhancement features

Such features are the key capabilities that enable enterprises to drive process improvements and include predictive and prescriptive analytics, automation recommendation, and simulation analysis, which we look at below.

Predictive monitoring

The capability to monitor processes in near real-time to track and predict key process parameters/metrics – such as waiting time, throughput time, and rework rate – is critical to identify corrective actions. Predictive monitoring and automatic triggering of alerts/notifications about expected KPI breaches or SLA violations or other events will enable business managers to proactively take actions to limit the downstream impact of any unwanted events/scenarios.

Enterprises can leverage this capability to predict the duration of a particular case/order and plan their operations accordingly. Process mining providers are increasing investments in AI/ML algorithms to improve the accuracy of these predictions.

Automation recommendations and triggering

The inability to maintain a healthy automation pipeline is one of the key challenges hindering the scaling of digital transformation initiatives. Presently, most process mining solutions display the current degree of automation within discovered processes and evaluate certain metrics to identify automation opportunities. A critical capability is to assess the automation potential to help prioritize identified opportunities.

Another capability that could play a key role in managing processes in an agile manner will be the ability to execute pre-built workflows that initiate activities in downstream systems/applications and trigger automations using Robotic Process Automation (RPA), Intelligent Document Processing (IDP), or conversational Artificial Intelligence (AI) technologies. These actions can be linked to and triggered based on the derived process insights to help enterprises minimize the impact of any breach. Allowing users to set pre-defined rules to automatically trigger such actions could further enhance the utility. Built-in human-in-the-loop automation capability enabled through user input forms could be extremely useful in critical business situations that require judgment calls while ensuring high responsiveness.

Operating in an open ecosystem through APIs and offering pre-built integrations with technology solutions offered by other intelligent automation players (for example, RPA technology providers) and enterprise system providers (for example, Salesforce) will further democratize process mining's action-trigger capability, expand its use, and maximize value realization.

> Advanced features such as predictive monitoring and alert/action triggering will help enterprises tackle problems and manage KPIs better. We are looking to leverage these capabilities to predict the late-payment rate and duplicate bills in collections management
>
> – Business Process Manager, Accounting, a leading contract logistics provider

Guidance on improvement opportunities

Several process mining providers have invested in simulation analysis, which involves defining scenarios and running process simulations to aid business decisions. It involves configuring what-if scenarios by defining certain attributes/metrics (for example, number of FTEs, cost per FTE, and throughput time) to evaluate cost and time savings. While most providers continue to offer Monte Carlo Simulation, a few providers have started offering an advanced AI-based simulation analysis. However, few enterprises are leveraging this capability effectively as AI-based simulation delivers results with higher accuracy and the analysis is not statistical in nature.

Simulation analysis capability can be leveraged to offer an out-of-the-box dashboard suggesting key improvement opportunities and the potential impact. Enterprises can leverage this to provide business managers with a clear view into the key improvement opportunities (for example, changing the suppliers or team size and reducing late payments) and their potential impact across dimensions (for example, the number of affected invoices, percentage improvement in on-time payments, and cash savings), thereby improving time-to-action. Additionally, this capability can help assess the automation potential to prioritize the identified opportunities and evaluate the potential impact on the process. It can also help gauge the potential impact of process reengineering/redesign initiatives on the expected value and volumes.

Enterprise-grade user experience

Process mining solutions analyze log data and provide a visual view of the discovered process, along with dashboards for relevant insights. While they help understand processes better, the time-to-insights is significantly high. Users must either understand the complex dashboards or create new ones to get different kinds of insights. To improve the solution's utility and enable business users/managers to adopt process mining at scale, a more intuitive approach to deriving insights is required via:

Question-based exploration

Providing an enterprise-grade user experience with a question-based exploration approach can significantly expand the scope and increase the extent of use. A question-based process exploration can help users retrieve insights more easily and quickly. It can allow users to select from a list of pre-configured questions that are available on the platform to get instant answers on their screens. The pre-configured questions could focus on the different and most important business KPIs and will depend on the process or use case under analysis. For example, for accounts payable, probable

questions would include What is the on-time payment rate?, What is the touch rate?, and What is the days payable outstanding?

Such pre-configured questions can be displayed to users, who can get answers at the click of a button. A curated graph that offers a drill-down capability and allows users to filter the answers based on time series and other parameters can further enhance the utility and ease of use. This capability will improve the user experience for process owners and business managers who want to obtain faster insights on different KPIs.

> The question-based exploration capability will have a positive impact on the entire transformation journey by enabling non-technical users to perform process analysis on their own
>
> – Business Process Manager, Accounting, a leading contract logistics provider

Pre-built packaged solutions

Packaged solutions/applications for horizontal processes or industry-/function-specific processes (procure-to-pay, order-to-cash, accounts payable, accounts receivable, etc.) and standard enterprise systems (SAP, Oracle, etc.) help dramatically reduce the time to value for enterprises. The packaged applications that leverage process mining insights to drive executions will be key in enabling faster adoption of process mining and ensuring a quick RoI for enterprises

Process mining providers are offering these packages, and, as the market evolves, we expect an increase in the breadth and sophistication of packaged solution offerings in the process mining market. A step further ahead in this journey would be for providers to develop dedicated applications that can help scale the use of process mining and enable enterprises to act quickly on the derived insights.

Integrated process mining and process modeling

Process mining solution with integrated process modeling capabilities would enable enterprises to design and reengineer/innovate processes from the same platform. The derived insights could reveal the loopholes, bottlenecks, and inefficiencies that exist in processes that can be addressed using process modeling capabilities. Integrating modeling with mining can bring life to process models as they can be designed from the modelled environment and improved/enhanced from the same platform.

Enterprises also need flexibility in designing the to-be or reference model by themselves. Process modeling capabilities help enterprise users to build these reference models, which can be further leveraged in process mining to carry out benchmarking exercises or perform conformance checks.

Data privacy and governance

Process mining solutions require access to event logs that typically contain sensitive information about enterprise products/services, customers, and employees. Pre-built algorithms to encrypt/decrypt data

from event logs and anonymize specific attributes enhance the proposition for data privacy. Additionally, role-based access to different users in the organization and multiple deployment options such as private cloud and Bring Your Own Key (BYOK) aids in data protection. Process mining providers are embedding these features in their platforms to meet enterprises' data security requirements. They are also providing the ability to automatically mask Personal Identifiable Information (PII) data or sensitive information about enterprise products/services, customers, and employees. Some providers are offering a pre-built repository of words/fields that need to be masked in the captured data. They are also working to adhere to security standards such as the General Data Protection Regulation (GDPR), Federal Risk and Authorization Management Program (FedRAMP), Health Insurance Portability and Accountability Act (HIPAA), and System and Organization Controls (SOC), which will further accelerate adoption.

Integration with complementary technologies

Enterprises today are moving away from siloed adoption of diverse technologies and looking to achieve greater value by combining different intelligent automation solutions, such as RPA, process mining, process orchestration, conversational AI, and IDP. Notably, some of the key process enhancement capabilities talked about earlier in this report can only be executed when the process mining solution is integrated with other automation technologies.

A few process mining providers are also building proprietary capabilities to offer a holistic IA solution, combining process mining with complementary technologies, while others are forging strategic partnerships to allow enterprises to leverage best-of-breed solutions. A holistic IA solution would ensure seamless and robust integration, thereby enabling a unified user experience. For instance, it would help enterprises discover and monitor processes using process mining, extract data from documents using IDP, and trigger automation directly from the platform using RPA.

Future outlook for process mining

Process mining technology is evolving rapidly with a host of innovative capabilities. The need to overcome data challenges and visualize cross-departmental processes is expected to drive these innovations. The evolution of event log-based mining to more visual, graph-based mining will further expand the technology's scope. Moreover, the shift from dashboard-based insights to more intuitive question-based exploration will remove barriers for non-technical users, improve scalability, enhance user experience, and drive customer-/partner-led innovation.

Process mining providers are raising their R&D investments to offer advanced capabilities such as predictive & prescriptive monitoring, AI-based simulation, and next-best-action recommendations.

Process mining solutions can currently detect process performance and compliance problems, send alerts, recommend corrective actions, and either support the user in triggering these actions or automatically trigger actions for a subset of problems. With technological advances, human workers will not need to constantly monitor processes, spend time and effort in drawing insights, and decide on the next-best-action. In fact, they will rely on the system to assist with any unusual behavior(s) and recommend improvement opportunities and options. Going forward, we believe that process mining will enable a fully self-governing enterprise and allow the system to function even in case of unexpected incidents.

Today, businesses find it extremely challenging to adapt to changing market dynamics, evolving customer expectations, and unexpected disruptions. Transformation of business processes is the key to meeting new business goals in the digital-first world. Process mining provides a data-based approach to achieving operational excellence. It has the potential to deliver cost, operational, and strategic benefits enabling enterprises to see shifts in both top-line and bottom-line while meeting their green-line objectives.

With increasing enterprise focus on driving operational excellence and accelerating digital transformation initiatives, process mining is poised for increased adoption. However, organizations face several challenges in scaling process mining adoption. These include lack of solution awareness, limited data availability, challenges in data transformation, and high complexity in interconnected processes. Advanced capabilities such as guided data clean-up, question-based exploration, object-based discovery, predictive monitoring, action triggers, improvement opportunity guidance, and advanced data security and governance features, would address the above challenges. Process mining will provide the foundation from which enterprises can achieve holistic, scalable, and sustainable transformation and unlock the next level of benefits for their organizations.

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