

5 STEP GUIDE

How to Select Process Mining Software



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GUIDE

5 STEP GUIDE TO SELECTING PROCESS MINING SOFTWARE

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Contents

Executive Summary

Step 1: Business case

Elements of a Strong Business Case

Understanding Process Mining Use Cases

Process Mining Business Case Template

Step 2: Vendor Selection Team

Secure Executive Sponsor

Focus on Task, Not Title

Name a Ringleader

Step 3: Price Performance ratio

What's the Minimum Cost of Investment

Is the Technology Scalable

What's the Vendors Business Model

Can the Concept be Proven

Step 4: Data Compatibility

System Perspective

Data Type Perspective

Step 5: Proof of concept

Set SMART Goals

Understand Methodology and Tool

Executive Summary

Investing in business technology is an exercise which requires a mix of inward reflection, clear communication, and strategic buy-in. Business needs must be accurately identified and effectively conveyed to the appropriate stakeholders. In order for a technology investment to fulfil its true potential, decision makers must match these needs with corresponding solutions.

When software investment is identified as such a solution — because let's be clear, blind investment in technology is an inadequate approach to problem solving — business leaders must direct a comprehensible and concise software selection process.

This 5 step guide to process mining software selection helps leaders invest with intent.

1. Build strong business case — written justification for why a project is worthy of execution. First define a use case (process discovery, conformance checking, resource optimization or cycle time optimization) then complete our business case template. [> go to Step 1](#)

2. Assemble vendor selection team — team authority is gained via an executive sponsor, without which, a purchasing decision may be ineffectual. For additional members, focus on job task, not title. Job titles will vary, but the need for specific fields of expertise remain — strategy, tech, finance, operations, procurement, and process expert. [> go to Step 2](#)

3. Evaluate price performance ratio — safeguard ROI by assessing the vendor's price performance ratio with these four questions: What's the minimum cost of investment? Is the technology scalable? What's the vendor's business model? Can the concept be proven? [> go to Step 3](#)

4. Ensure data compatibility — approach data preparation from two angles, system perspective (Oracle, SAP, Microsoft Dynamics, etc.) and data type perspective (CSV, Excel, SQL, etc.). [> go to Step 4](#)

5. Conduct proof of concept — a successful PoC pushes the abstract framework of business theory into factual evidence relevant to a specific organization. A well run PoC will result in a strong project mandate.

[> go to Step 5](#)



Step — 01

Build a Strong Business Case

“A goal without a plan is just a wish.”

Antoine de Saint-Exupéry

A well defined business case is the first step towards introducing process mining software into an organization. A business case is the detailed justification for why a project is worthy of execution both in terms of financial benefit and human resources.

Elements of a Strong Business Case

A strong business case should:

- > be detailed enough to preempt risks
- > build confidence in the project
- > include a financial forecast which estimates cost of implementation vs potential cost savings or revenue growth (ROI)
- > include a persuasive executive summary which explicitly states why the project is worthy of pursuit

Detailed aspects of the business case should be referred to as a navigational tool throughout the project, but a straightforward answer for “why process mining?” should be stated upfront.

IF YOU CAN'T
CONVINCE YOURSELF
IN SIMPLE TERMS
WHY PROCESS
MINING SOFTWARE
IS THE ANSWER
TO OPERATIONAL
SHORTCOMINGS OR
A CONDUIT TOWARDS
PROCESS EXCELLENCE
— YOU'VE LOST YOUR
CASE.

Understanding Process Mining Use Cases

The importance of defining a use case is not to settle on just one, but rather to understand the scope of application upfront. For example, process discovery may be the primary use case defined in the business case. In that discovery, conformance checking or process optimization may become secondary uses cases. Prepare for this possibility in the business case.

The top four most common process mining use cases include:

1. Process discovery

This use case is valuable when processes are unknown or have deviated from the original process architecture. Process discovery puts control back into the hands of users and enables decision makers to redesign ineffective or outdated processes. Process discovery also helps determine routing probabilities, path distribution and decision points.

2. Conformance checking

Conformance checking is a primary process mining use case which compares process execution with process design. To what degree do processes comply with self governing rules and legally binding regulations? Are there process outliers and how do they come about?

3. Resource optimization

Resource optimization reveals the real distribution of resources per task. Identifying how resources are used in a process — and how work is transferred among resources — leads to a better understanding of output quality and cycle time. This use case can highlight top performing employees, highly effective processes and reveal the ways in which resources are getting gobbled up with little results.

4. Cycle time optimization

This use case identifies slow activities, long wait times, process bottlenecks and throughput time. Cycle time optimization varies slightly from resource optimization in that the primary focus here is on reduction, rather than enhancement. It's the difference between effective work (resource optimization) and efficient work (cycle time optimization).

Process Mining Business Case Template

With primary and secondary use cases established, now is the time to dig into the details of a business case. Start with a solid executive summary, followed by specific details relating to project background, goals, use case, limitations, scope and financial impact.

Executive summary

Briefly state 'why process mining'
Impactful summary to justify process mining

Background

- < Why now? What changed to bring about this need?
- < Was there a significant process rupture?
- < Have process been neglected for sometime?
- < Are competitors benefiting from process mining? Is this more than just a market trend? Explain how process mining specifically relates to your organization and situation (go beyond trending technology, but included process excellence as a competitive advantage in the background section).

End-goal

What is the end goal of implementing process mining?

- < Improve customer experience?
- < Avoid fines or penalties?
- < Attract new suppliers or partners?
- < Reduce operational cost?
- < Seize new opportunities?

Use case

- < For which purpose(s) will process mining be primarily used?
- < Process discovery?
- < Conformance checking?
- < Enhancement of resources?
- < Enhancement of cycle time?

Boundaries

- < What won't process mining solve?
- < Set expectations and identify technology limitations

Option appraisal

- < How does process mining compare to other potential solutions?
- < Is manual / non-technical process optimization an option?
- < Remember: “do nothing” is an option to be explored (along with risks and benefits of such)

Scope

- < Who’s involved?
- < Consider all phases of a process mining project including: selecting a vendor, preparing in-house systems, day-to-day project management, strategic direction, etc.
- < Who will be impacted?
- < Which specific elements of business or departments will be impacted?
- < How will day-to-day operations change?
- < Who will decide how internal resources will be allocated to this project?

Timeline / Schedule

- < Outline project implementation (must be time sensitive!)
- < Who does what, when and how?
- < Include decisions and/or goals to be reached during each phase

Risk analysis

- < What happens if we fail?
- < What happens if we do nothing?
- < Are we on the brink of non-compliance?
- < What happens if regulations change?

Financial evaluation

- < How will process mining software save money?
- < Include specific costs related to wrong product shipment, lost leads or cost of non-compliance. Consider how poor process performance relates to employee churn.
- < Consider cost benefits of RPA (identified via process mining)
- < How will process mining software increase revenue?
- < Estimate the value of new clients or improved customer experience.
- < Consider revenue increase from better use of resources or reduced cycle time.
- < What is the cost of process mining implementation?
- < Is it a one-off or are there ongoing costs?
- < What is the purchasing strategy?
- < Do we own the technology or do we lease?
- < What is the human resource cost?
- < Can we implement this technology in-house or do we need consultants?
- < What is the cost of doing nothing?
- < ROI summary
- < Drive home the benefits of process mining with an ROI summary which can be understood at a glance (ie: one number)



Step — 02

Assemble a Vendor Selection Team

“No one can whistle a symphony.
It takes an orchestra to play it.”

H.E. Luccock

Finding and vetting the right technology partner is an important step in a process transformation which requires a dedicated team. Not seriously considering the compatibility of your organization with technology partners can lead to negative repercussions down the line, such as incompatible systems, poorly managed expectations, and failure to reach goals.

Start by securing an executive sponsor, then fill out the team by focusing on job task, not title.

Secure an Executive Sponsor

An executive sponsor lends stature to a process mining project and can help rally support from other senior decision makers. In most cases, the executive sponsor won't be in the nitty gritty of selecting process mining software, but should be part of the selection team and sign off on the final approval.

An executive sponsor's strategic insight, authority, and reach, paired with their good graces, will provide a strong foundation for process mining vendor selection.

Focus on Task, Not Title

A Chief Technology Officer may be just as capable as the Head of Digital Innovation and a Product Evangelist may know more about a particular process than a Controls Manager.

Shakespeare was right. A rose by any other name would smell as sweet.

The following is a rundown of areas of expertise which should be covered by your software selection team. Don't worry if your team doesn't match 6 out of 6. The ideal team size at your organization may include as few as 3 people or as many as 8 depending on task silos.

Strategic vision

a person with a high level understanding of company vision and far reaching goals.

< **They might be called:** CEO, CIO, COO, Global Strategy Manager, Strategy & Improve Manager, Chief Experience Officer

< Questions they answer

- < Does this vendor fit our company culture?
- < Can they help us fulfil our vision?
- < How will they support our pursuit of operational excellence?
- < Does this purchase fit with our other strategic goals?

Technology focus

person in charge of technology, understands system vulnerabilities and limitations.

< **They might be called:** CTO, Head of Product, Head of Technology

< **Questions they answer**

- < Can this vendor be trusted with our data?
- < What data security protocols does this vendor follow?
- < Which IT systems need to be connected? Are they ready for such a project?
- < What are the known (internal) system vulnerabilities and limitations?

Cost control

a person with authority to authorize budgets and evaluate price / performance ratio.

< **They might be called:** CFO, Financial Advisor, Head of Finances

< **Questions they answer:**

- < What budget is allocated for this type of purchase?
- < What type of price / performance ratio should this vendor provide?
- < What fixed and ongoing costs are associated with this vendor?

Operational perspective

a person in touch with day to day operations and deep understanding of processes, workflows and team resources.

< **They might be called:** COO, Operations Manager, Lead Functional Manager, Operations Advisor, Head of Operations

< **Questions they answer**

- < Which processes will be the focus for this project?

- < Does this vendor meet our needs for improving process effectiveness and efficiency?
- < Do we have the team resources and know how to work with this software?

Buying strategy

person in charge of strategic buying decisions or purchasing strategy.

- < **They might be called:** Head of Procurement, Buying Manager
- < **Questions they answer:**
 - < Does this vendor meet our procurement criteria?
 - < Do we have existing relationships that may help us in purchasing this technology?
 - < How does this purchase fit into our larger procurement strategy?
 - < What terms of purchase should be met?

Set the scope

a person who works day to day with processes and will be able to provide a “boots on the ground” perspective for vendor requirements. Also able to commit time to doing vendor research and providing initial options analysis.

- < **They might be called:** Business Analyst, Category Expert, Functional Lead, Business Process Expert, Process Analyst, Process Manager, Team Lead
- < **Questions they answer:**
 - < What are the essential market standards / features for process mining vendors?
 - < What does the competitive landscape look like for process mining vendors?
 - < Which vendors have good online customer reviews and case studies?

Name a Ringleader

Next, avoid inertia by designating a group ringleader. This person pushes the project along, coordinates schedules, and ensures process mining vendor selection doesn't end up dead on arrival. This person doesn't necessarily need to be the project sponsor and in fact might be the scope setter.

The project ringleader, sometimes called Business Venture Manager, should have enough time to focus on vendor selection and stay in constant contact with both the team and top vendors being considered for selection. Nominate someone with detailed systems knowledge or a person who is well connected to multiple teams.



Step — 03

Evaluate Price Performance Ratio

“The simplest definition of a budget is telling your money where to go.”

Tsh Oxenreider

What is the Minimum Cost of Investment?

Not every business has the ability nor desire to throw a million dollars/euros at process mining. Understanding the minimum cost of investment from both sides of the vendor/client relationship is a good starting point. Know your own budget limitations upfront in order to make best use of your time.

QUESTION — Is there a maximum spend authorized for this type of investment?

QUESTION — What's the barrier to entry in terms of getting started with each vendor?

Is the Technology Scalable?

Process mining technology is scalable by nature, but access to scalability depends upon a vendor's business model. Whether your business wants to start small and scale up, or has a big vision for full operational transformation, consider how this technology investment can grow with business needs.

THE HIGHEST
PRICE TAG
DOES NOT EQUATE
TO THE BEST
VENDOR MATCH.

What is the Vendor's Business Model?

A **per user business model** means each additional user must pay for access to or use of software. Contrarily, it also means there are no limitations on the number of processes which can be mined under that single user license. This model enables users to freely explore the power of process mining and let process discovery lead to process optimization. If you have a small, dedicated team of process miners and an unfixed or unknown number of processes to be mined, this model is best for your business.

< Pros

- < Unlimited number of processes can be mined under single user license
- < Option to discover additional processes without additional investment
- < Ability to shift process focus as learnings amass

< Cons

- < Large process mining teams must pay per user access
- < Limits simultaneous user access

A **per process business model** puts limitations on process access rather than user access. This approach might work well for organizations which have a very specific workflow which needs to be mined, and for those with large teams which require individual access to such software.

< **Pros**

- < Unlimited number of users can access the system simultaneously
- < Good for management oversight

< **Cons**

- < Limits ability for organic process discovery without additional investment
- < Agile approach to process discovery is limited by budget

Can the Concept be Proven before Full Investment?

Proof of concept is an idea that makes positive ROI nearly foolproof. It's a try before you buy model which allows you to dip your toes in the pool before plunging into the deep end. Proof of concept in terms of process mining is when a vendor lets you apply their technology to a specific process or subset of data before committing to a complete license purchase.



Step — 04

Ensure Data Compatibility

“In God we trust, all others bring data.”

W Edwards Deming

Process mining software has the astounding ability to mine nearly any type of data from almost any system. The power of process mining software is that it takes in all this data, in multiple formats, across multiple systems and mines for the process flow.

If you hunt for a shortcoming, you'll find it only in data which goes undocumented or exists outside a system — paper logs, word of mouth, scribbles on a notepad — which essentially do not exist at all! Even voice data from call centers can be mined.



Where data lives,
process mining lives.

Approach data compatibility from two perspectives: systems (ERP, CRM, BPM, etc.) and data types (CSV, XES, SQL, Excel, etc.). By looking at data preparation from this dual angle, your team will be able to apply this framework to specific systems, platforms and data types used in your organization.

System Perspective

Talk to various department heads and get a list of all platforms and systems used. You might be surprised to find a team relying on a niche platform outside the main ERP network, however, the most common “home” for process data are ERP systems, such as Oracle, SAP, NetSuite, Sage, Microsoft Dynamics, etc.

Here is a quick checklist of the most popular and ubiquitous information systems used in business organizations which work with Minit process mining:

ERP

- > Odoo
- > Microsoft Dynamics
- > Sage 100 / Sage Intacct
- > NetSuite
- > Infor M3
- > Deltek Vision
- > SYSPRO ERP
- > Oracle
- > SAP
- > Ecount ERP
- > Focus 9
- > Exact

CRM

- > Salesforce
- > Sugar CRM
- > SAP CRM
- > Oracle Engagement
- > Sage CRM

BPM

- > BPM Online
- > Nintex
- > TIBCO
- > KiSSFLOW
- > Zoho
- > Appian
- > Pegasystems
- > Alfresco

Marketing & Marketing Automation Systems

- > Marketo
- > HubSpot
- > Magento
- > Google Analytics

Project Management

- > Atlassian JIRA
- > Podio
- > Trello
- > Basecamp
- > Asana
- > ServiceNow

Data Type Perspective

For most process mining projects, thinking about data preparation in terms of systems will be the priority. People correlate processes with the systems in which they work. But when you get down to the actual way in which process mining software mines data within these systems, it's all about import formats.

Import formats include CSV, XEX, MXML, SQL Server, Excel, Access and ODBC. Thanks to ODBC (Open Database Connectivity) compatibility — a driver interface by Microsoft which allows applications to access data using SQL — the sky's the limit. Through ODBC drivers the list of systems which can be mined for process data extends to QuickBooks, Zendesk, AdWords, Twitter, Instagram, MailChimp, Dropbox, Evernote, and [so, so, so much more](#).



Step — 05

Conduct Proof of Concept

"Discovering the unexpected is more important
than confirming the known."

W Edwards Deming

Proof of Concept (PoC) provides the hard evidence needed to support a business hunch. A successful PoC pushes the abstract framework of business theory into factual evidence, relevant to a specific organization. For a proof of concept to fulfill its purpose — demonstrate worth of pursuit — clear goals with measurable targets must be set.

Start with SMART goals,
end with project mandate.

For example, an insurance company with the aim to improve claim processing time may form a goal statement as follows:

The goal of this week-long PoC is to identify the top 3 drivers of claim processing delay and decrease processing time by 25% from 72 hours to 54 hours.

Specific

focused solely on claim processing delay.

Measurable

hard numbers give a baseline on which results can be pegged.

Achievable

10 - 25% time reduction on a lethargic or outdated process is achievable.

Relevant

select a goal that will have meaningful impact on current needs.

Time-based

a proof of concept investigation is short in time and big on impact.

With SMART goals identified and data prepared, it's time to run the analysis. This is where the preparatory work pays off and things start to move quickly. The process mining vendor whom you selected for a PoC will lead this stage. In addition to software speed and usability, focus on the power of dashboards. How robust are system dashboards? Do they meet or exceed given criteria? How impactful is the process visualization? How easy is it to navigate the tool?

Remember, this proof of concept should not only be a trial to prove process mining as a viable technique, but also a test of the tool itself. Ask questions, be involved in data analysis and gain a deep understanding of both the methodology and the tool.

Wrap up the PoC with strong results and a mandate to move forward. Documentation of the entire PoC is important and should include a description of each preparatory stage, results, shortcomings, finding explanations and potentially an ROI calculation.

Focus on methodology
and power of product.

Challenge the vendor to close strong with a presentation of findings. Utilize their expertise and outside perspective to document clear outcomes of the PoC and ways in which your business can move forward.

We Believe in the Power of our Product

Equipped with these 5 steps to process mining software selection, we humbly suggest putting Minit process mining software to the test. We believe in the power of our product and stand accountable for its performance. Grow into an industry leader and achieve operational excellence with Minit.

Here's what our clients have to say about Minit.

"Every entrepreneur needs to know on a large scale what is done and not done in their business. The best option for detailed inspection and an efficient internal audit is Minit."

— Yolanda, Human Resources Manager

"Minit identifies specific ways to improve business performance and eliminate the inefficiency and risk of operations."

— Freiber, Production Assistant

We're up for the challenge. **Are you?**

Start a customized trial of [Minit Process Mining](#) today.

Try Minit

Minit is robust enterprise-grade Process Mining software with a rich 360° collection of dashboards and process performance indicators. Whether you are focused on reducing operational costs, shortening customer feedback time, taking advantage of new revenue streams, or optimizing old ones, Minit Process Mining reveals an otherwise invisible map towards process improvement.

TRY MINIT



Get in touch with our team to learn how it can help deliver effective business process improvement at your organization.