

# PROCESS PERFORMANCE INDICATORS (PPIs)

WHEN KPIs ALONE  
ARE NOT ENOUGH

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# #1

# Introduction

Process Performance Indicators (PPI) are automated measurements which evaluate the operational success of process-oriented organizations. The focus here is on operations and the automated assessment of process performance. While Key Performance Indicators (KPI) are unanimously employed to deliver a strategic overview of how a company is doing, PPIs offer a drilled-down perspective focused on individual processes.

PPIs are not a replacement for KPIs, but rather a supplement for organizations whose competitive advantage lies within processes excellence. Process-driven organization exist beyond the typical realms of manufacturing and banking. Any organization which acknowledges business processes as the core of existence, and further, prioritizes process performance as a means to competitiveness, is a process-driven organization.

Whether processes are explicitly defined in formal documentation or only vaguely implied through repetitive actions, processes are what make or break organizations. When embraced, monitored and measured process performance is a strong indicator of the bottom line, as well as employee happiness, operational risks and customer satisfaction.

## Differences between KPIs and PPIs

Organizations across a multitude of verticals, sizes, regions and business models use KPIs to evaluate goal fulfilment. KPIs steer strategic goals and give decision makers daily insight into the overall health of an organization. PPIs are more granular. They take aim at an individual process during a specified time period and deliver time-stamped, verifiable data. Where KPIs can't (and shouldn't) be bogged down with day-to-day intricacies, detail is exactly the thing upon which PPIs thrive.

The distinction between KPIs and PPIs can be further defined by four areas; scope of indicators, objectivity of data, financial relation and automation of output.

# #2

## Scope of indicators

KPIs inform managers of an organization's route towards strategic goals. These indicators address a large scope of business performance across a range of activities. They relay how close an organization is to stated objectives and take on a macro view of performance. KPIs focus on the big picture and are often reported on a weekly, monthly or quarterly basis.

Decision-makers use KPIs as a navigational tool to demonstrate progress towards a strategic vision.

PPIs take in a more narrow, yet detailed scope of how processes function. While the effectiveness of KPI reporting depends on delivering a top-level, bird's eye view of performance, PPIs are concerned with the micro level of operations. Both KPIs and PPIs require a SMART (specific, measurable, achievable, realistic, time-based) approach to definition, however, PPIs often focus on more minute aspects of operations.

PROCESS  
OWNERS  
USE PPIs  
AS LINKS  
IN A CHAIN  
TOWARDS  
OPERATIONAL  
GOALS.

# #3

## Objectivity of data

Process analysis is purely objective. Exposing a process creates transparency and compares the difference between expectations (process architecture, process documentation) and reality (as-is process). PPIs are generated void of human emotions. These indicators represent the raw output of actual operational flows.

KPIs aim for objectivity but remain more subjective in nature due to involvement of human assessment and user-generated data. KPIs not only benefit from but demand human subjectivity. Without it, incorrect causality or assumptions can occur which mislead decision makers. Because KPIs deal with a broader scope of performance, a small dose of subjectivity can render a KPI more valuable. PPIs, on the other hand, necessitate an objective view due to their focus on 'as-is' process performance.

PPIs are built from as-is data output void of human emotion. KPIs benefit from a small dose of subjectivity in order to place them within a company's strategic vision.

Both types of performance indicators rely on data to tell a story. Quantitative analyses are essential to making KPIs and PPIs communicable across teams and timelines. By using quantitative outputs to track performance a cohesive view can be created over time.

A distinction between KPIs and PPIs arises with the introduction of qualitative analysis. Where the core analytical value of PPIs is determined by quantitative means, KPIs deliver value through comparison and the addition of qualitative analysis.

KPIs measure the difference between where we want to be and where we are. They are the comparison between an actual value and a target value over a certain period of time. Like PPIs they rely on setting SMART goals, but make more room for the inclusion of qualitative analysis. Customer experience for example, may be measured on a series of points or number-based surveys (quantitative), but may also receive qualitative input from a secret shopper or open-ended questions.



# #4

## Financial relation

PPIs and KPIs differ in their relation to finances. Only a small portion of PPIs have a financial component while most KPIs are financially driven. While both performance indicators impact the bottom line, PPIs are less directly connected to financial results and focus more on process quality, efficiency, effectiveness and time. KPIs, however, are almost always focused on reducing costs or increasing revenue.

### **A few examples:**

- 1 A process quality indicator may be measured by percentage of products rejected. A financial association exists, but it's not the focus of process quality. The process aims for maximum optimization and 100% product acceptance for reasons beyond costs. Flaws in process quality may also relate to process compliance and deeper issues within a supply chain. Squarely focusing process quality based on finances is a short-sighted approach.
- 2 A process time indicator may be measured by the time it takes to complete invoicing. Faster invoicing will improve cash flow which has a clear financial implication. The process itself, however, is being measured based on time between issuing of an invoice and payment of an invoice. On the other hand, a KPI related to cash flow will be directly tied to overall cash flow and less specifically focused on speed of invoices.

PPIs MAY  
INCLUDE  
A FINANCIAL  
COMPONENT,  
BUT ARE NOT  
SQUARELY  
ASSESSED  
ON COST  
OR REVENUE  
ALONE.

# #5

## Automation of output

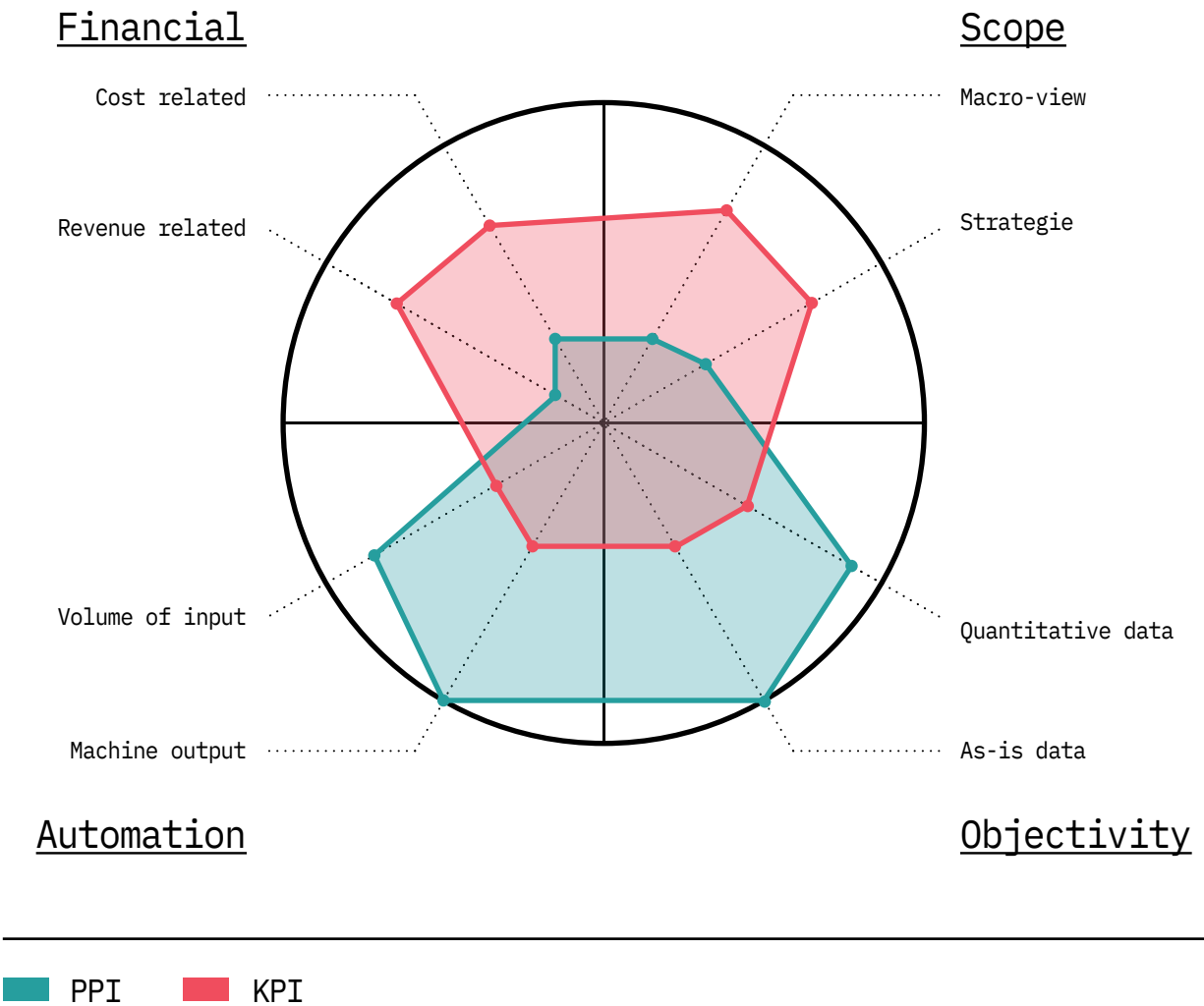
PPIs are measured and directly evaluated by the automated data produced in specific process workflows. KPIs can also be automated and are often tied to intricate dashboards which pull data from a number of sources. Individual KPIs, however, deal with a smaller amount of data, rely less on automated machine output and often have an analytical element pre-reporting.

PPIs are a direct result of process output. Operational in nature, PPIs are created by a large volume of data which necessitate the use of automation. Time-stamped event logs across IT systems form the base of a process map and show strength in numbers. PPIs based on low data volumes may not reveal long term trends.

KPIs rely on user-generated data. PPIs insist on direct process output.

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KPI / PPI chart




# #6


## Selecting PPIs

Organizations will develop different PPIs based on operational needs. Common areas of process performance measurement include quality, time, cost and flexibility. Time and cost indicators work inversely to quality and flexibility indicators making trade offs a necessary part of process optimization. Time and cost aim to be low while quality and flexibility aim to be high.

Business strategy and organizational focus will dictate which of the four criteria are of top importance. For most enterprise business processes (e.g. P2P, O2C etc.), time and cost are the most important factors, followed by quality and flexibility.



**Time** is both a source of competitive advantage and a fundamental performance measurement. Analyzing performance on this dimension can be done by looking at lead time and throughput time (consisting of service time, queue time, wait time, move time and setup time).



**Cost** is related to time because time costs money (manual labor has an hourly rate, machine labor has costs including machine depreciation and power consumption). Costs are also closely related to quality and flexibility. Poor quality causes costly rework and a rigid process results in a costly process execution.



**Quality** can be considered as either external or internal quality. External quality indicates the customer's perception of quality, whereas internal quality is seen from within the manufacturer's side.

Customer satisfaction is the most important measure of external quality. This satisfaction can be related to the product (i.e. the output) or the process leading up to the product.

Product quality takes product performance, conformance and serviceability into account. Process quality considers information ability and bureaucratic language simplification. The quality of the workflow, as seen from an operator's point of view, is internal quality. Job characteristics indicate high internal quality, additionally group and leader factors influence motivation and job satisfaction.



**Flexibility** is the ability to react to changes. This dimension can be identified for individual resources, individual tasks and for the process as a whole. Five types of flexibility are stated: mix flexibility, labor flexibility, routing flexibility, volume flexibility, and process modification flexibility.

## **Why KPIs often fail to drive operational performance**

KPIs alone often fail. Large organizations tend to operate in silos which leads to teams or departments not sharing information and leaving large knowledge gaps. Data can also be siloed with little, if any, integration existing across landscapes. This makes generating a valuable KPI very difficult if the data in different areas cannot be related to each other.

Process Mining software gives visibility of an end-to-end process cutting through data and organizational silos. Process Mining can provide organizations with the ability to overcome common problems in implementing KPIs and PPIs, and its analytics can help organizations re-engineer their processes. Process Mining can measure and continually monitor process performance to drive business outcomes.

Minit Process Mining provides the ability to unravel the complex web of events that make up a process and provide an output of high-level KPIs which provide valuable insight into process performance. This ability to dive into transactional level data allows process owners to identify where serious deficiencies lie and start implementing a solution.

Process Mining answers which process is the fastest, which is most eligible for optimization and helps to identify the best process characterized by a combination of different performance indicators depending on your needs.

ORGANIZATIONAL  
AND DATA SILOS  
CAN MAKE IT  
DIFFICULT  
TO GET AN  
END-TO-END  
VIEW OF WHAT  
IS REALLY  
GOING ON.



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

TRY MINIT

