

Touchless Rate: Measuring automated processes without manual intervention

The touchless rate describes the proportion of business processes that run fully automatically without manual intervention. In procurement, the metric usually refers to order and invoice processes, for example Purchase-to-Pay. A high touchless rate reduces processing costs, throughput times and error rates – and at the same time shows how mature the digital procurement organisation is.

Key facts

- The touchless rate measures the percentage share of processes handled automatically and without manual intervention.
- The typical reference points in procurement are order and invoice processes along the Purchase-to-Pay chain.
- In practice, values range from around 60 to 90 per cent; above 90 per cent is considered ambitious for mature organisations.
- Drivers are structured master data, catalogue solutions, clear approval rules and good supplier data.
- The metric is suitable as a control variable for process automation, but does not replace an examination of cost-effectiveness in individual cases.

Definition: touchless rate

The touchless rate (also “Touchless-Quote” or “touchless processing rate”) indicates the proportion of transactions in a process that are handled fully automatically without employees having to intervene manually. It is typically expressed as a percentage: number of touchless cases divided by the total number of cases. The term originates from the finance and shared services world and has established itself in both indirect and direct procurement as a metric for process automation.

Distinguishing it from other automation metrics

The touchless rate differs from the automation rate: the latter measures whether a process is technically capable of automation and connected, whereas the touchless rate only counts transactions that actually ran without any touch. It also differs from the straight-through-processing rate used in finance through its process-related focus on ordering, goods receipt and invoicing. A uniform definition of the numerator is important: even a single manual corrective intervention removes a transaction from the rate.

Typical use cases in procurement

The focus is on the ordering process (Requisition-to-Order) and invoice processing (Invoice-to-Pay). Catalogue orders, recurring call-offs under frame agreements and conformant invoices with an automatic three-way match are usually considered touchless. The supplier self-assessment process during supplier onboarding or the creation of new supplier master records can also be assessed using this metric. Those who define the term more broadly apply it to the entire Order-to-Cash and

Purchase-to-Pay cycle.

Methods and approach for increasing the touchless rate

A high touchless rate is not achieved by software alone, but through the combination of clean master data, standardised processes and clear control rules. The approach and levers can be systematised along the Purchase-to-Pay process. What is crucial is first measuring the current rate reliably and analysing the main causes of manual intervention.

Master data and catalogue management

Manual intervention frequently arises from incomplete material master data, missing price information or free-text purchase orders. Catalogue-based procurement, mandatory fields in the purchase requisition process and a clean commodity group structure significantly increase the rate. Supplier qualification and structured supplier onboarding via a supplier portal also ensure that master data, bank details and ordering terms are available in machine-readable form. In practice, the touchless rate for catalogue orders typically rises considerably more than for free-text orders.

Standardising approval and exception rules

Every approval is a manual touch. Approval levels based on value thresholds, automatic approvals for small standardised amounts and role-based approvals reduce unnecessary interventions. Exceptions such as price variances or quantity differences should be handled via clearly defined tolerance rules. For contentious cases, defined escalation paths help – for example, a delivery reminder or an escalation clause in the contract – so that exceptions are dealt with quickly and traceably instead of blocking the process.

Supplier-side integration

Electronic invoicing, simple data formats and payables with only a single supplier ID avoid reconciliation effort. A supplier portal through which suppliers enter order confirmations, delivery notes and invoices themselves reduces manual intervention in goods receipt and accounts payable. In addition, methods such as Evaluated Receipt Settlement (ERS) can replace the invoice altogether: the invoice is generated automatically from goods receipt and order data, which sustainably increases the touchless rate in the invoice process.

Key KPIs around the touchless rate

The touchless rate only unfolds its steering effect in combination with other metrics. A small set of KPIs that jointly captures process quality, cost and speed makes sense. Anchoring the metric in steering systems such as the procurement business plan or the procurement manual also increases its binding force.

Key metrics in Purchase-to-Pay

Besides the touchless rate itself, the most informative metrics are processing costs per purchase order or invoice, throughput time from requisition to order, and the number of manual changes per transaction. The invoice error rate and the share of invoices with a three-way match complete the picture. Those who include supplier onboarding and supplier maintenance can additionally measure the share of active suppliers in the supplier portal.

Benchmarking and target values

There is no industry-wide binding target value. In practice, mature organisations achieve values of well over 80 per cent in the ordering process, while free-text service orders or complex contract manufacturing often remain below that. It makes sense to define target values per process type and commodity group – for example, high rates for catalogue items and C-parts, more realistic targets for project-related procurement. The procurement portfolio analysis helps identify the commodity groups where automation has the greatest leverage.

Including operational performance

Automation must not come at the expense of supply security. The touchless rate should therefore be considered alongside metrics such as delivery readiness, safety stock, on-time delivery or the occurrence of line stop situations. A rising rate combined with declining on-time delivery suggests that critical transactions were over-automated or exceptions were not properly escalated.

Risks and controls in touchless processes

The higher the touchless rate, the more important controls that run automatically become. Otherwise, errors in master data, tolerance rules or interfaces can multiply unnoticed. Risk management and automation are therefore two sides of the same coin.

Typical risks

Common risks are duplicates and errors in supplier and material master data, automatic approvals without economic plausibility, and undiscovered price variances within tolerance limits. The small-order process also carries risks: if it is fully automated, maverick buying or non-compliance can be difficult to detect afterwards. Finally, incorrectly configured matching rules can cause faulty invoices to pass through anyway.

Controls and prevention

Effective measures include risk-based sampling, automated duplicate and plausibility checks, and regular reviews of tolerance rules. A procurement guideline with clear rules for order types and careful process design in competitive procedures, including e-auction preparation, prevent automation workarounds from being circumvented. Four-eyes principles can be replaced by role-based system controls, provided access rights are properly managed and logged in an audit-proof manner.

Responsibilities and governance

The touchless rate should be assigned to a clearly named owner, for example the Purchase-to-Pay process owner within the procurement organisation. Requirements regarding targets, measurement and exceptions should sensibly be recorded in the procurement manual. In addition, annual supplier meetings provide feedback on whether processes run stably from the supplier's perspective or repeatedly cause manual rework on both sides.

Current developments: automation and AI in procurement

The maturity of touchless processes increases with the spread of cloud procurement systems, supplier portals and AI-supported document capture. Invoice recognition, automatic data matching and intelligent exception handling further increase the achievable rate. At the same time, the focus is shifting: it is no longer just the volume of touchless transactions that counts, but the quality of the automation.

AI and intelligent process automation

AI-based invoice classification, automatic suggestions for account assignment and posting, and voice-based purchase requisitions further reduce the number of manual interventions. For buyers, the content of the work shifts away from transaction processing towards supplier development, negotiation and risk management. The touchless rate then serves as a control variable showing how much capacity the procurement organisation actually gains for value-adding tasks.

Network and platform thinking

Increasingly, procurement processes are designed around standardised data exchange formats and supplier networks. The more suppliers are connected electronically, the higher the touchless rates without additional internal rework. Selecting and integrating suitable suppliers – for example via supplier qualification – thus itself becomes a driver of the automation metric.

Steering the touchless rate in practice: a procedural model

Anyone who wants to improve the metric effectively needs a repeatable approach: measure, analyse causes, apply levers, verify impact. The following steps have proven themselves in practice and can be applied to both order and invoice processes.

As-is analysis and root cause assessment

First, the current touchless rate is determined per process type and – ideally – per commodity group. All transactions that were processed manually are then analysed: what reasons, what points in the process, what costs? In practice, recurring patterns quickly emerge, such as missing catalogue assignments, incomplete approval rules or incorrect supplier data.

Applying levers and measuring impact

Measures are derived from the causes – from master data cleansing to new approval rules to supplier integration. It is important to measure the touchless rate continuously and with a uniform definition so that measures show a traceable effect. The metric is also useful as an argument to management when investment in process automation or a supplier portal needs to be justified.

Typical metrics

Touchless rate – ordering process: typically 60–90%

depending on commodity group; catalogue orders significantly higher than free-text orders

Touchless rate – invoice processing: often > 75%

requires a stable three-way match between purchase order, goods receipt and invoice

Processing cost per purchase order: in practice €30–100 per transaction

falls measurably as the touchless rate increases

Supplier on-time delivery: > 95%

counter-control to ensure automation does not jeopardise supply security

Practical example

A medium-sized mechanical engineering company with around 40,000 purchase orders per year found in an analysis that only about half of all transactions ran through without manual intervention. The main

causes were free-text purchase orders, lack of catalogue maintenance and frequent invoice discrepancies. Within twelve months, the touchless rate in the ordering process rose to over 80 per cent – while processing costs fell and supplier loyalty remained stable.

- Introduction of catalogue-based procurement for C-parts and office supplies with mandatory fields in the purchase requisition process
- Approval levels based on value thresholds with automatic approval for small amounts
- Mandatory supplier onboarding via a supplier portal, including supplier self-assessment
- Expansion of Evaluated Receipt Settlement (ERS) with recurring frame agreement suppliers

Conclusion

The touchless rate is a practical metric for making the degree of automation in procurement and purchasing processes visible. However, it only unfolds its effect in combination with clean master data, clear approval and exception rules, and active supplier integration. Higher rates reduce processing costs and throughput times – but presuppose that controls run automatically alongside and exceptions are properly escalated. Those who steer the metric deliberately gain not only efficiency but also capacity for strategic procurement tasks. What is crucial is classification per commodity group and process type, rather than chasing a blanket target value.

Frequently asked questions

What does touchless rate mean?

The touchless rate indicates the proportion of transactions that are handled fully automatically without manual intervention. In procurement, it typically refers to order and invoice processes. It is expressed as a percentage and is regarded as an indicator of the process maturity of a procurement organisation.

How do you calculate the touchless rate?

The formula is: number of transactions completed without manual intervention divided by the total number of transactions, multiplied by 100. It is important to have a uniform definition of when a transaction counts as “touchless”. Even a single corrective intervention usually removes it from the rate.

What value is a good touchless rate?

There is no binding target value. In practice, mature organisations often achieve values above 80 per cent in the ordering process, while complex or project-related procurement remains below that. Target values per process type and commodity group make sense rather than a blanket figure.

How can the touchless rate be increased?

The main levers are clean master data, catalogue-based procurement, automated approval rules with tolerances and electronic connection of suppliers via a portal. Methods such as Evaluated Receipt Settlement (ERS) also reduce manual intervention in the invoice process. The prerequisite is a reliable measurement of the current state with root cause analysis.

What are the risks of a high touchless rate?

The more automated the processes are, the more important automated controls become, such as plausibility and duplicate checks or risk-based sampling. Otherwise, errors in master data or tolerance rules can multiply unnoticed. A rising rate combined with declining delivery reliability or supply security is a warning signal.

What is the difference between touchless rate and automation rate?

The automation rate measures whether a process is technically automated and connected. The touchless rate, by contrast, only counts transactions that actually ran without any touch. A connected process can be automated yet still require manual intervention – in which case the touchless rate is low.