

Insourcing: deliberately bringing services and production steps back into your own company

Insourcing refers to the deliberate re-transfer of services, manufacturing processes or functions that were previously outsourced to external providers back into one's own company. It is therefore the counterpart to the classic outsourcing strategy and closely linked to the trend towards reshoring. In strategic procurement, insourcing is an important instrument for making supply chains more resilient, building or expanding core competencies and controlling costs in the long term. The following article explains the definition, approach, KPIs, risks and current developments from a buyer's perspective.

Key facts

- Insourcing transfers previously externally provided services back into the organisation, either through own investment or through the acquisition of know-how.
- Typical drivers are supply chain security, quality control, protection of core competencies and long-term cost advantages.
- The decision requires a structured profitability analysis that also takes into account fixed follow-on costs such as personnel, maintenance and tied-up capital.
- In practice, insourcing projects in manufacturing typically take 6 to 24 months from decision to production maturity.
- Procurement and supplier management remain relevant even after insourcing, for example for raw materials and operating supplies.
- Transition management with requalification, material release and material traceability is crucial for the changeover.

Definition: insourcing

Insourcing is the re-transfer of a previously externally sourced service or process into one's own company. This can be achieved by building up own capacities, reintegrating former employees or taking over know-how and machinery from the previous supplier. Conversely, the term outsourcing, or an outsourcing potential analysis, refers to the externalisation of such services.

Distinction from reshoring and backsourcing

Insourcing describes the return of processes to one's own organisation, regardless of whether the previous supplier was domestic or foreign. Reshoring, by contrast, refers to the relocation of manufacturing sites from abroad back to the home country, where production may also continue to be awarded to external partners. Backsourcing, in turn, describes the takeover of the service without any intermediate step by the outsourcing company itself. In practice, the terms often overlap, for example when a site abroad is closed and manufacturing is set up in-house at the same time.

Forms of insourcing

Insourcing can take place at different levels of intensity. In addition to the complete takeover of a process, partial insourcing, jointly operating a facility or acquiring and integrating a supplier are common variants. Setting up internal service units, for example for cleaning, packaging or test processes, also falls under this. The choice of model depends on the investment volume, order backlog size and the strategic importance of the process.

Methods and approach in insourcing projects

An insourcing project typically follows a classic change management sequence: decision preparation, feasibility and profitability assessment, detailed planning, transition phase and stabilisation. Since insourcing often means that an existing supplier relationship ends or is restructured, the role of procurement is particularly sensitive – from terminating framework agreements to securing alternative sources during the transition period.

Feasibility and profitability analysis

The starting point is a comparison of the total cost of ownership of both options. In addition to the purchase price, investment costs, personnel and payroll-related costs, energy, maintenance, scrap, tied-up capital, leasing and depreciation costs as well as dismantling and disposal costs must be included. It is often overlooked that fixed follow-on costs are incurred even when utilisation fluctuates. A scenario calculation with low and high volumes as well as a break-even volume indicates at what utilisation level insourcing becomes economically viable. Tax and funding aspects such as investment grants should also be examined on a case-by-case basis – expert advice is recommended here.

Know-how, personnel and requalification

A key success factor is qualification. In practice, managers and key personnel from the previous supplier are taken on, or in-house staff undergo requalification, in order to build up process knowledge, operating skills and inspection experience internally. To ensure the new internal supply reaches the previous level of performance, documented work instructions, trained inspectors and defined release processes are necessary. For materials and components, this means – analogous to supplier qualification – material release of internally manufactured parts towards downstream processes and customers.

Transition management and contract termination

Replacing a supplier requires care: framework agreements and ongoing orders must be terminated in a legally compliant manner or wound down, whereby notice periods, any service credits (SLA) and performance reductions must be observed. Security for investments and transitional services can be provided through a performance bond if suppliers take on transition obligations. Until internal capacity is available, procurement should be able to carry out alternative sourcing beyond a second source threshold in order to hedge delivery risks during the transition phase. A clear allocation of roles according to procurement roles (RACI) prevents friction between procurement, production, quality management and controlling.

Key KPIs and assessment metrics

In order to measure insourcing success, key figures are needed before, during and after implementation. They capture the profitability, quality and delivery performance of the new internal supply and enable comparison with the initial situation.

Cost and profitability indicators

Key figures are the unit costs compared with the previous supplier price, the payback period of the investment, the break-even volume and the net present value of the decision. In addition, it is worthwhile to consider in-house production depth as a strategic indicator. Costs that are easily overlooked in the external view should also be measured: internal transport, warehousing and obsolete stock, which can arise with in-house production through costly changeovers or unnecessary residual quantities.

Quality and delivery indicators

The quality of internal manufacturing is assessed using scrap and rework rates, first-pass yield and the complaint frequency of downstream customers. On-time delivery and timely provision to internal customers should be tracked in the same way as for external suppliers. It is advantageous to manage the internal unit like a supplier – with fixed contacts, defined delivery and inspection processes and measurable targets. This preserves comparability with the previous performance.

Risks and controls in insourcing

Insourcing is not a risk-free undertaking. Misjudgements regarding utilisation, know-how development or capacity can nullify the expected benefits. A structured risk analysis and clear control mechanisms are therefore indispensable.

Economic and operational risks

Common risks are underestimated fixed costs, overly optimistic utilisation assumptions, extended ramp-up times and quality problems during the introduction phase. Dependence on key personnel and the availability of skilled workers are also recurring obstacles in practice. In addition, the on-time delivery of the previous supplier may suffer during the transition if it anticipates losing the contract. These risks can be countered with phased plans with defined milestones, parallel second-source supply until stabilisation and regular plan-actual comparisons of the business case assumptions.

Control through contract design and audits

Until the takeover is complete, ongoing contracts should be actively managed: price adjustment clauses and transparent price breakdown forms facilitate recalculation during the transition phase, and an orderly supplier rating ensures comparability. Analogous controls apply to internal processes: internal audits, defined material traceability and documented inspection processes ensure that the new internal supply permanently maintains the required level. Protection commitments or contractual non-compete clauses with the replaced supplier may also be relevant in individual cases and should be reviewed legally.

Current developments and classification for procurement

The past few years have significantly increased interest in insourcing and reshoring. Supply chain legislation, geopolitical tensions, energy price volatility and the desire for shorter transport routes have changed the trade-off between cost advantage and security of supply. This creates a new balance for buyers between external purchasing and in-house production.

Resilience and sustainability as drivers

Many companies now evaluate sources of supply not only by price but also by resilience criteria. Insourcing allows better control over material traceability, carbon footprint and product standards.

Sustainability requirements such as the recyclability of packaging or the Product Environmental Footprint (PEF) can also often be managed more directly with in-house production than across multiple tiers of suppliers. At the same time, in-house production creates new procurement requirements for raw and process materials, whose price development should be hedged via a suitable price index or price adjustment clauses.

Insourcing as part of a hybrid strategy

In practice, many companies do not choose either/or but a hybrid strategy: core components are insourced, peripheral processes remain external. Procurement then manages a portfolio of own capacities and external partners, governed by a preferred supplier programme and defined second source thresholds for critical parts. Digital tools, for example for netting optimisation within the own group or for traceability in order-to-cash processes, are also gaining in importance. Those who establish outsourcing potential analysis and insourcing assessments as regularly recurring processes can respond more flexibly to market developments.

Typical metrics

Unit cost comparison internal vs. external: typically 5–15% savings

Guideline value; strongly dependent on utilisation and process complexity

Payback period of the investment: typically 2–5 years

Should be defined in advance in the business case

Scrap rate after ramp-up: < 2–3%

Compared with historical supplier values

On-time delivery of internal manufacturing: > 95%

Measured as delivery reliability towards internal customers

Break-even volume: project-specific

From this order volume onwards, insourcing is economically viable

Practical example

A medium-sized mechanical engineering company had been sourcing precision turned parts from a supplier abroad for years. Recurring delivery delays, rising transport costs and quality complaints prompted the company to bring the manufacture of these parts in-house. Procurement supported the project from business case preparation through to material release of the first internal batches.

- Preparation of a total cost of ownership analysis including investment, personnel costs and scrap risks over five years
- Taking on two key personnel from the previous supplier and structured requalification of in-house staff
- Securing the transition phase through extended framework agreements and a second source with a defined second source threshold
- Introduction of monthly KPI reviews covering unit costs, scrap rate and on-time delivery after go-live

Conclusion

Insourcing is a strategic tool that goes beyond mere cost considerations. It strengthens control over quality, delivery capability and core competencies and reduces dependence on individual suppliers. At

the same time, it requires careful profitability analyses, consistent know-how development and professionally managed transition management. Procurement plays a key role here – from contract termination through securing alternative sources to ongoing KPI management. Those who treat insourcing and outsourcing as regularly reviewed alternatives create the foundation for a robust and competitive procurement and manufacturing strategy.

Frequently asked questions

What does insourcing mean?

Insourcing refers to the re-transfer of services, processes or manufacturing steps that were previously outsourced to external providers back into one's own company. The opposite is outsourcing. Typical objectives are greater control, lower long-term costs and a more resilient supply chain.

When is insourcing worthwhile for companies?

Insourcing is usually worthwhile when utilisation is high, the service is of strategic importance, sufficient specialist expertise is available and the total cost of ownership confirms the savings compared with external purchasing. Supply chain security and quality requirements can also be decisive factors. A scenario analysis with a break-even analysis is recommended in every case.

What is the difference between insourcing and reshoring?

Insourcing means performing a service in-house again, regardless of the location of the previous supplier. Reshoring describes the relocation of production sites back to the home country, where production may continue to be contracted out to external partners. Both concepts can occur in combination.

What are the risks of insourcing?

Typical risks are underestimated fixed costs, insufficient utilisation, ramp-up phases taking longer than planned, quality problems during introduction and the loss of know-how from the previous supplier. The transition phase is also critical if the supplier being replaced reduces its cooperation. Countermeasures include phased plans, second-source cover and regular plan-actual comparisons.

What role does procurement play in insourcing?

Procurement analyses the economic viability, terminates or restructures framework agreements, secures transitional supply and supports qualification and material release. Even afterwards, procurement remains relevant, for example for raw materials, operating supplies and cost control via price adjustment clauses. A clear allocation of roles according to RACI is helpful.

How long does an insourcing project typically take?

This depends heavily on the complexity. For simple manufacturing or service processes, 6 to 12 months is realistic; for capital-intensive manufacturing with qualification and release processes, it is often 12 to 24 months or more. The transition from external to internal supply should always be secured in parallel.