

Slow-Mover Analysis: Strategic Management of Long-Term Stock Items

The slow-mover analysis is a systematic procedure for identifying and assessing items with low or irregular consumption in the warehouse stock. It helps buyers and supply chain managers identify unnecessary capital tie-up and make targeted decisions on disposal, consolidation or stockholding. Slow movers are a permanent issue, particularly in the capital goods and mechanical engineering industries, as spare parts and components are often required only rarely. Those who analyse slow movers consistently reduce warehouse costs and measurably improve stock quality.

Key facts

- Slow movers are items with low or sporadic demand, typically defined via a movement period of 180 to 365 days.
- The analysis is frequently based on the ABC-XYZ analysis, in which slow movers are usually assigned to classes C-Z or C-X through to C-Z.
- In practice, slow movers typically tie up 30 to 50 % of the stock value, even though they achieve only a low turnover rate.
- The aim of the analysis is a differentiated strategy: disposal, consolidated ordering, alternative procurement, supplier-side inventory management or targeted stockholding.
- Slow-mover analyses are typically repeated once or twice a year, as consumption patterns change.
- A falling stock value for slow movers has a directly positive effect on liquidity and cash flow.

Definition: slow-mover analysis

The slow-mover analysis is an inventory management procedure for the systematic identification of items that are moved rarely, consumed little or only sporadically drawn from stock. It assesses these items according to shelf life, capital tie-up and future demand. The result is a classified list with concrete recommendations for action for each item.

Distinction from dead stock and antiquing

Slow movers still move, albeit rarely; dead stock generally no longer shows any movement for several years. Many companies define slow movers as items with a movement frequency of once or twice a year, and dead stock as items with no issues for three years or more. The slow-mover analysis therefore serves as an early warning: it identifies stock before it becomes dead stock. Antiquing additionally refers to the collection of outdated technical documentation for such items, which is retained for potential future demand cases.

Typical causes of slow movers

Slow movers frequently arise from design changes, discontinued predecessor products, over-optimistic initial orders or suppliers' minimum order quantities. Safety-driven stockholding of spare parts for long-running machinery also deliberately creates rarely moving stock. A sound demand analysis before

the initial purchase prevents many of these cases. In practice, it is evident that a considerable proportion of slow movers stems from historical projects for which no foreseeable demand remains.

Placement within stock classification

The slow-mover analysis is not an isolated tool but complements the ABC-XYZ analysis. While the ABC analysis classifies by value and the XYZ analysis by consumption structure, the slow-mover view filters specifically by movement speed. Items of classes C-Z (low value, very irregular demand) are classic candidates. Assignment should ideally be carried out via a consistent material group hierarchy, so that results can be assessed and managed group by group.

Methods and procedure of a slow-mover analysis

A sound analysis follows a fixed process: prepare the data basis, define the criteria, classify, derive measures and document decisions. The effort is worthwhile above all for large product ranges with several thousand items or more.

Data basis and criteria

The basis is movement data from the ERP system: consumption and sell-out figures, order and call-off history, last movement, stock quantity and value, as well as replenishment lead time. Common criteria are the time since the last movement, the average movement frequency per year and the stock value. An upstream duplicate check is important, so that the same item is not classified incorrectly under several material numbers. Legacy stock without any relevance for inventory planning should also be sorted out in advance.

Classification and prioritisation

In the next step, items are classified by value and movement behaviour, often in combination with the ABC-XYZ analysis. High-value slow movers are prioritised first, as capital tie-up is greatest here. A strategy of measures is defined for each class: liquidate, sell, consolidate, hold at the supplier or deliberately keep in stock. These strategies should ideally be anchored in the supplier portfolio, so that the procurement side is also included.

Catalogue of measures

Typical measures are: clearance sale or scrapping where there is no future demand, return to suppliers, switching to ordering only upon concrete demand, consolidation of demand across multiple sites, and discount negotiations with reduced minimum quantities. For spare parts with long replenishment lead times, targeted stockholding often remains the right choice. The decision should always be made on an interdisciplinary basis between procurement, sales or engineering.

Key KPIs and metrics of the slow-mover analysis

KPIs make the analysis measurable and create the basis for regular monitoring. In practice, a handful of KPIs have proven their worth and can be used equally on the customer side and the supplier side.

Stock and turnover KPIs

The central KPI is stock coverage, i.e. the holding period, measured as the ratio of average stock to average consumption. Added to this are the share of capital tied up by slow movers in total stock, and the number of items without movement within a defined period. These figures are typically reported

quarterly. A falling share is regarded as a measure of success for the analysis.

Process and procurement KPIs

In addition, the following are relevant: replenishment lead time, the proportion of emergency purchases for previously stocked slow movers, and the scrap and write-off rate from liquidated stock. For the service and spare parts sector, delivery capability for rarely requested parts also counts. The aim is to achieve stock reduction not at the expense of availability.

Risks and controls

The slow-mover analysis carries risks if it is carried out purely on a computational basis. Overly aggressive liquidation endangers delivery capability, service levels and long-term customer relationships. Controls and defined approval processes are therefore essential.

Wrong decisions due to a lack of demand validation

Historical consumption data alone is not sufficient: design engineering and sales must assess future demand, for example for spare parts for machines in operation or for planned repeat projects. Without this coordination, expensive re-procurement with long lead times looms. Close coupling with demand planning and with future tender planning prevents misclassification. The sourcing concept for rare demand should also be clearly regulated.

Organisational controls

An approval process for liquidation and stock reduction is effective, ideally involving controlling, sales and design engineering. Changes to inventory planning parameters should be documented in an auditable manner. Regular repetition of the analysis – typically every six months – prevents new slow movers from arising unnoticed. Coupling with the bottleneck analysis is also sensible, in order to recognise whether a slow mover becomes critical in the event of a fault.

Current developments and digital support

Modern ERP and inventory systems increasingly support the slow-mover analysis in an automated way. AI-supported demand forecasts help to distinguish between genuinely dead stock and items that are required sporadically but reliably.

Automation and forecasting

Many systems today offer automated classifications and warnings when items exceed defined shelf-life thresholds. More advanced approaches use pattern recognition to make sporadic demand more predictable, for example in the case of seasonal or project-driven call-offs. This remains a form of support, but does not replace the expert assessment by inventory planners and engineering.

Supplier-oriented alternatives

Increasingly, stock is being shifted towards the supplier: through consignment-like models, the transfer of inventory planning responsibilities, or clear agreements on delivery times upon demand instead of stockholding. The prerequisite is a reliable coordination of delivery schedule call-offs as an alternative to stockholding. Especially for geographically remote procurement, for example in the context of offshoring, extended replenishment lead times must be factored into the decision.

Typical metrics

Shelf life / stock holding period: > 180 days

common threshold for classifying an item as a slow mover; depends on industry

Share of slow-mover stock value: typically 30–50 %

benchmark of total stock value without movement within the analysis period

Movement frequency: ≤ 2 per year

common classification criterion for slow movers

Dead stock threshold: > 3 years

movement period after which stock is usually referred to as dead stock

Repetition interval of the analysis: 1–2× per year

usual cycle for updating the classification

Practical example

A medium-sized mechanical engineering company with around 25,000 stocked items carried out a systematic slow-mover analysis for the first time. The evaluation showed that items with no movement within twelve months tied up around 40 % of the stock value, without any identifiable current demand. Following coordination with design engineering and sales, a package of measures was implemented.

- Classification of all items by movement frequency and stock value in combination with the ABC-XYZ analysis
- Liquidation or sale of around 3,000 items without future demand following expert approval
- Switching more than 4,000 sporadically required items to ordering only upon concrete demand with defined delivery times
- Six-monthly repetition of the analysis with clear responsibility within the inventory management team

Conclusion

The slow-mover analysis is a proven instrument for making hidden capital tie-up in the warehouse visible and systematically reducing it. Its value arises not from the mere classification, but from the consistent derivation and implementation of measures in dialogue between procurement, inventory planning, engineering and sales. Those who repeat the analysis regularly and combine it with a clean material group hierarchy create lasting stock quality. At the same time, sound demand validation protects against premature liquidation of critical spare parts. In this way, the slow-mover analysis combines liquidity-oriented stock management with delivery capability and service quality.

Frequently asked questions

What is a slow mover in the warehouse?

A slow mover is an item that is consumed or drawn from stock only rarely, typically less than once or twice a year. It differs from dead stock in that there is still movement. Although slow movers tie up capital, they can be deliberately held for service and spare parts supply.

How do I carry out a slow-mover analysis?

The basis is movement data from the ERP system: consumption, last movement, stock value and replenishment lead time. This is followed by a classification, often combined with the ABC-XYZ analysis.

Subsequently, measures such as liquidation, consolidation or safety stock are defined for each item group and coordinated with engineering and sales.

What is the difference between a slow mover and dead stock?

Slow movers still show sporadic movement, e.g. once or twice a year. Dead stock, by contrast, has had no issues for several years and is generally considered largely worthless. The slow-mover analysis therefore serves as an early warning system to control stock before it becomes dead stock.

From when is an item considered a slow mover?

The threshold is company-specific and depends on the industry and product range. Items are often classified as slow movers if they show no movement, or only one movement, within 180 to 365 days. What matters is applying the definition consistently and documenting it, so that results remain comparable.

Which KPIs are relevant in the slow-mover analysis?

Key metrics are shelf life, the share of slow-mover stock value in total stock, and the number of items without movement within the analysis period. In addition, the scrap and write-off rate from liquidations, as well as the delivery capability for rarely required items, are helpful. These KPIs are typically reported quarterly.

Should slow movers rather be stocked or discontinued?

It depends on future demand, replenishment lead time and criticality. Spare parts with long procurement lead times or high downtime cost relevance are deliberately kept in stock. Where no foreseeable demand exists and availability on the market is normal, ordering only as required is usually more economical. The decision should always be made on an interdisciplinary basis.