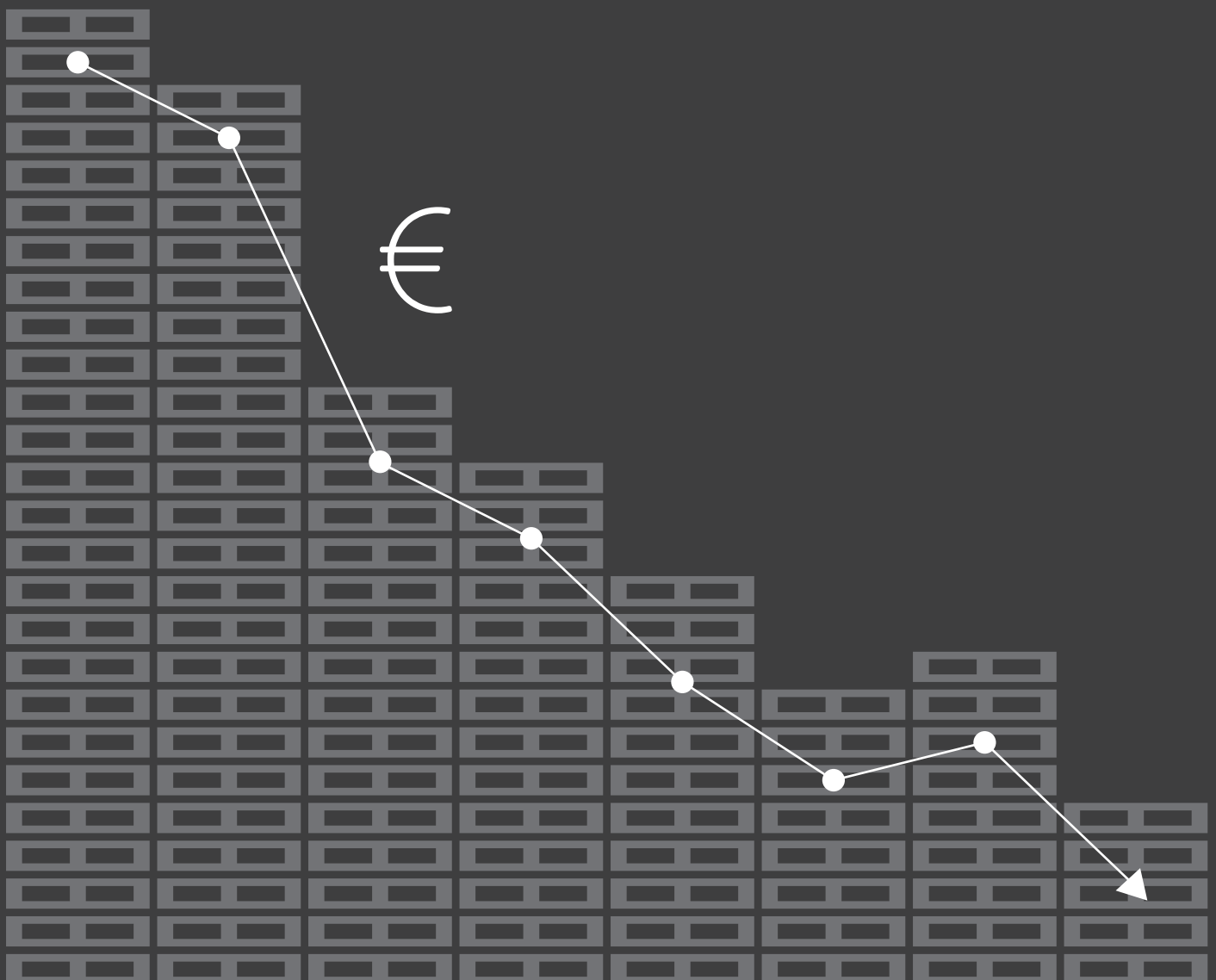


Report

Revealing the hidden costs: Reducing the Total Cost of Ownership of Pallets



Introduction

The importance of pallets in supply chain operations

In the world of logistics and supply chain operations, pallets have a vital role to play when it comes to facilitating and streamlining the movement, storage, and transportation of goods.

From providing a standardised way to package and handle goods, through to their compatibility with automated processes, they help to reduce labour costs and improve efficiency. They also have multiple other advantages such as providing efficient storage solutions, cross-docking capabilities and the facilitation of accurate inventory management and sustainability.

How much do they really cost?

When it comes to assessing the cost of pallets, many businesses focus solely on the unit price, often assuming the low cost - usually wooden pallets - to be the best value choice. However, this simply isn't the case. It's essential to understand that there are multiple costs associated with pallet ownership, many of which are less obvious at the outset. For companies to reduce their overall expenditure on pallets, they need to assess their Total Cost of Ownership (TCO) and explore ways to reduce it.

In this report, we'll highlight some of those hidden costs that businesses face and provide some potential strategies to help mitigate them.





What is Total Cost of Ownership (TCO)?

A TCO looks at all the financial aspects that go beyond the initial purchase price of a product or service and encompasses all costs associated with owning, operating, and maintaining an asset throughout its entire lifecycle.

While the upfront cost is always a consideration, TCO takes into account the hidden and often overlooked expenses that can substantially impact the overall financial picture. These hidden aspects can include ongoing maintenance,

repair, energy consumption, upgrades, training, losses, replenishment, and disposal costs.

By evaluating TCO, you can make better informed decisions, identifying the most cost-effective solutions that provide long-term value rather than being swayed solely by the initial price tag. In essence, TCO offers a more holistic and accurate assessment of the true economic impact of an investment over time.



Understanding the TCO of Pallets

TCO of pallets refers to all expenses associated with using pallets throughout their entire lifecycle within a supply chain or logistics operation. Understanding the TCO of pallets is essential when it comes to making decisions that help to optimise efficiency and improve cost-effectiveness within your business.

Let's break down the various costs associated with TCO for pallets:

The more obvious costs

→ Initial acquisition costs

This is the upfront cost of purchasing or acquiring pallets and can include the price of new pallets, used pallets, or rental fees if applicable. New designs and materials, such as plastic or composite pallets, may offer longer lifespans and lower maintenance costs but can have higher initial acquisition costs.

→ Administration and operational costs

This can include anything and everything, from the salaries and benefits of staff responsible for managing pallet inventory, through to pallet cleaning, sorting and handling. Also implementing software and hardware for tracking, and even things like the costs of regulatory compliance needs.

→ Delivery costs

All expenses related to shipping pallets to and from suppliers, distribution centres, manufacturing facilities and customer locations need to be considered. Factors influencing these costs include distance, weight, mode of transportation (e.g., truck, rail, ocean), as well as, of course, fuel, driver and labour costs.

→ Maintenance and repairs

Regular inspections and maintenance are essential to ensure pallets remain safe and functional. This includes the cost of labour, tools, and materials needed for repairs.

→ Pallet disposal and recycling

When pallets reach the end of their useful life, there are costs associated with disposal, recycling, or reconditioning. This includes transportation to recycling facilities. It's essential to consider the environmental impact of pallets and sustainability efforts within the overall picture.

The more hidden costs

→ Storage costs

Pallets require storage space, and this incurs rent, maintenance, and organisation costs within warehouses or storage facilities.

→ Operational Inefficiencies

Not all pallets can be used within a food production environment for hygiene reasons or are compatible with automated systems such as robotic arms and conveyor systems. Both result in loads being transferred to other food-grade carriers which can lead to product damage, higher labour costs and lost time.

→ Lifecycle Durability

Assessing the durability and expected lifespan of pallets is crucial. Longer-lasting pallets may have a higher upfront cost but can be much more cost-effective over time.

→ Pallet loss

Pallets can get lost during transit or storage, leading to replacement costs. Tracking and security measures can mitigate these expenses.

→ Supplier Relationships

Bulk purchasing or long-term contracts can influence costs over the long-term. The best suppliers will offer fair and transparent pricing.

→ Customisation

Custom pallets designed for specific product needs may be necessary, but they can be more expensive than standard pallets.

→ Insurance

Most businesses choose to insure their pallets against loss, damage, or theft with these insurance premiums being an additional cost.





Calculating the Hidden Costs of Pallet Ownership

There are clearly a lot of factors to consider, so how then, do businesses know where to start when it comes to sourcing the right pallet solution for them, and understanding the total impact that it will have on their business long-term?

At Tosca, we start by exploring the whole picture when it comes to TCO analysis. Listed below are just some of the questions and considerations used to help businesses source the best possible solution and mitigate ongoing costs. It's useful to have a view on all of those areas that might be relevant for your business to find the right solution for you.

The choice of assets

- Have you been offered enough options, and do they meet your needs?
- Do you know that the price is fair?
- Are all associated costs transparent?

Administration, ordering and delivery

- How are the pallets ordered?
- Do you have a separate administration and file for each type of pallet?
- Is this managed via a trained employee?
- Is this employee always present?
- How much time is spent on processing each order?

Pricing

- Is someone checking the purchases and invoices?
- How do you keep on top of price fluctuations?

Expectations

- Do you always get what you expect?
- Are goods always on the right pallet?
- Are there sometimes differences in what you receive versus your order?

Quantity

- Do you always get the ordered quantity?
- Is there always enough availability?
- What about seasonal rush or scarcity?



Timing

- Do deliveries always arrive on time?
- Are larger safety stocks needed?

Quality

- Do you always get the desired or required quality?
- Do you have to check and select first?

Day rent Loader

- Check the rent only applies for the time the load carriers are with you?
- Understand that peak and low moments determine the amount of pallets?
- Check - do you always have enough pallets?
- How do/will you manage during peak times?

Day rent Unloader

- Does your customer pay rent or deposit?

Costs

- Does your customer pay rent for the pallets?
- Does your customer buy the pallets from you?
- Is a deposit charged?
- How does the administration of this proceed?

Whilst in Use

- Are they compatible with your automated systems?
- Are items ever damaged during transfer?
- What happens to the splinters and nails?
- Do the pallets contaminate the items being transported?

Collection

- What happens to the empties?

Sorting

- Do the empty pallets need to be sorted?
- Do they need to be separated by type and in different stacks?

Storage

- Do your pallets need to be stored indoors?
 - By pallet type
 - To be protected against weather and wind

Collection

- Do you have to arrange the collections yourself?
- Is this done by pallet type and supplier?
- What extra admin time is needed for this?

Damage

- Where should the broken or damaged pallets go?

Do you use exchange pallets?

- Are you obliged to keep an administration of this?
- Do you always have a certain number of empty pallets ready to exchange?
- Who determines the quality?

Maintenance

- How is the quality of the pallets guaranteed?
- Who checks if the pallet is still usable?
- On what criteria is this based?
- Who takes care of the cleaning?
- Is it always done in the same way?
- Using food-approved detergents?
- Who does the repairs?
- Who is responsible for the damages?
- What costs are incurred here?
- Are broken pallets replaced?
- Who takes care of that?

Damage

- Who is responsible for recycling?
- Is it a sustainable way of disposal?



Strategies to Mitigate your pallet Total Cost of Ownership

Taking all of this information into consideration, it's clear that the right strategy could enable your business to effectively reduce your TCO and optimise your pallet management for the long-term.

To help you put this into action, we've outlined some important steps to follow to deliver an effective pallet strategy for your business and drive down your TCO.



→ Start with identifying the best type of pallet type for your specific needs.

This is the upfront cost of purchasing or acquiring pallets and can include the price of new pallets, used pallets, or rental fees if applicable. New designs and materials, such as plastic or composite pallets, may offer longer lifespans and lower maintenance costs but can have higher initial acquisition costs.

→ Quality is crucial.

This can include anything and everything, from Invest in high-quality pallets that are less likely to break, splinter, or require frequent repairs. Well-maintained pallets can last longer, reducing replacement costs.

→ Implement an efficient pallet management system.

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→ Consider the value of technology.

Intuitive pallet software such as Tosca's Pool-It provides an easy and efficient way to track shipments and always be on top of your assets.

→ Regularly inspect pallets for damage and wear.

Remove damaged or unsafe pallets from circulation to prevent accidents and reduce replacement costs.

→ Establish a pallet recycling program where damaged pallets are repaired and reused or recycled.

Regular maintenance and repair can extend the lifespan of your pallets and reduce the need for replacements. Recycling is the more sustainable option.

→ Standardise pallet sizes and types to reduce complexity in your supply chain.

This can lower transportation, sorting and handling costs, as well as make it easier to source replacement pallets.

→ Invest in automated systems for pallet handling and storage.

If applicable, automation can reduce the risk of pallet damage during handling and improve overall efficiency but these systems require high quality pallets.

→ Build a strong partnership with pallet suppliers.

Whether renting or pooling, look for a partner who provides a consultancy approach as well as high levels of service and pricing transparency.

→ Maximise use of space in trucks and warehouses.

Efficient pallet stacking can reduce the number of trips required, saving on transportation costs. Choosing a reliable pooling partner also means used pallets will be collected regularly, reducing the number of pallets needing to be stored after use.

→ Decrease pallet partners.

By standardising your pallets, and decreasing the amount of "owners" of the empty pallets, you can significantly decrease the ramp-time for loading empty pallets. Cooperation with one pooling partner who collects all available empty pallets at once, will free up ramp time and decrease labour for loading the trucks.

→ Consider the environmental impact of your pallet choices.

Some industries are shifting toward more sustainable pallet materials, which may have long-term cost benefits and align with corporate sustainability goals.

→ Train employees on proper pallet handling techniques.

This will minimise damage and injury during loading, unloading, and storage.

→ Consider using pallet pooling services.

Leasing or renting pallets instead of purchasing them outright can reduce your upfront costs and allow for more efficient pallet management.



It's essential to regularly review and update your pallet management strategies to adapt to changing business needs and market conditions so you can ultimately save money and improve efficiency within your business.



The role of reusable pallets in reducing TCO

Reusable pallets offer several advantages over wooden pallets, especially single-use wooden pallets when it comes to reducing Total Cost of Ownership (TCO):

→ Longevity

Reusable pallets are designed to withstand multiple uses, making them more durable than wooden pallets, especially single-use wooden pallets that are disposed of after one use. This extended lifespan reduces the need for frequent pallet replacements, lowering procurement costs.

→ Cost efficiency

While reusable pallets may have a higher upfront cost compared to wooden pallets, their long-term cost-effectiveness is significantly better. Over time, the cost per use of reusable pallets is lower, as they can be used for many cycles before needing replacement.

→ Reduced Disposal Costs

Single-use pallets contribute to waste disposal costs, as they are typically discarded after a single use. Reusable pallets eliminate this expense and the associated environmental impact.

→ Sustainability

Reusable pallets align with sustainability goals by reducing the consumption of raw materials and the environmental footprint associated with pallet production and disposal. This can enhance your company's reputation and appeal to environmentally-conscious consumers.

→ Improved Pallet Management

Reusable pallets often come with tracking systems such as RFID tags or barcodes, making it easier to manage and locate pallets within the supply chain. This reduces the risk of pallet loss and improves overall efficiency.

→ Environmental Regulations Compliance

Some regions have regulations or incentives in place to encourage the use of reusable packaging, including pallets. Compliance with these regulations can help your business to avoid fines and penalties.



In summary, reusable pallets offer a cost-effective, sustainable, and efficient alternative to wooden or one-way plastic pallets. While they may cost more to buy upfront than wooden pallets, their extended lifespan and reduced disposal costs make them a superior choice for businesses aiming to lower their TCO in the long run, with these savings enhanced further when used as part of a full-service pooling solution.



Conclusion

Overall, it's clear that companies need to have a better understanding of their pallet TCO and then consider several strategies to optimise and reduce it.

However, in summary, reusable plastic pallets, especially when used as part of pooling solution, are certainly the best choice when considering the total cost of ownership over the longer term. From their compatibility with automated processes and equipment like forklifts and pallet jacks, to their reliable service and sustainability, they offer many advantages to businesses looking to mitigate their TCO.



Interested in understanding more about your pallet TCO?

Trust Tosca to deliver high-quality pooled plastic pallets which offer significant benefits to businesses aiming to manage their TCO.

Let's discuss how Tosca can assist you to make the switch.

Visit www.toscaltd.com

