



WHITE PAPER

Navigating the cost crunch

Real world solutions for warehouse and logistics operations

Warehouse and logistics operations have faced a relentless tide of ever-rising costs in recent years. Warehousing property costs alone, comprising rents, service charges, and taxes, grew by [10.1% in the 12 months to July 2023 across 52 global markets](#). Add in other rising costs, from labour and energy expenses to equipment maintenance and safety concerns, and the pressure to improve efficiency while reducing overheads can be overwhelming.

Many companies may be looking forward to a day when automated solutions can help overcome their labour issues. However, for most companies, that day still lies in the future and may remain an expensive dream.

Fortunately, there are many real-world solutions that can help companies grapple with the issues they face today. Innovative approaches and strategic investments are helping forward-thinking companies not just weather the storm but thrive amidst these financial pressures.

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The telemetry revolution

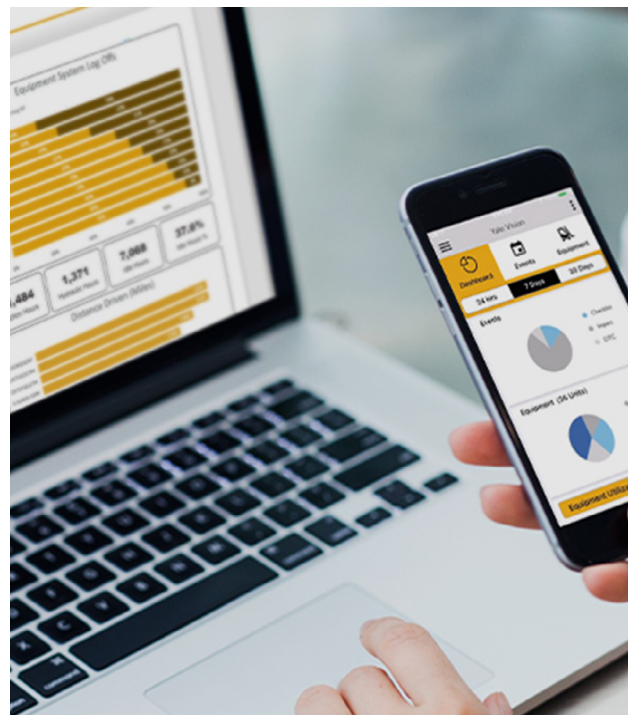
One of the most powerful tools in the modern warehouse manager's arsenal is advanced telemetry. These sophisticated systems provide real-time data and insights that can revolutionise fleet management and operational efficiency.

By implementing a state-of-the-art telemetry system, warehouse operators gain unprecedented visibility into their operations. These systems can track equipment usage patterns, identify underutilised assets, and highlight areas where resources are being stretched thin. This granular level of data allows for informed decision-making about fleet composition and task allocation.

For instance, telemetry can reveal that certain forklifts are sitting idle for long periods, while others are constantly in use. This information enables managers to right-size their fleet, potentially reducing the number of vehicles needed and cutting associated costs. Additionally, by redistributing workloads more evenly across the available equipment, companies can extend the lifespan of their assets and reduce wear and tear.

Moreover, telemetry systems can monitor equipment performance and maintenance schedules in real-time. This proactive approach to maintenance can significantly reduce downtime and prevent costly breakdowns. By addressing

minor issues before they escalate into major problems, warehouses can keep their operations running smoothly and avoid the hefty expenses associated with emergency repairs or unplanned equipment replacement.



The power of versatility

In the quest for cost reduction, versatility is key. Investing in multi-functional equipment can yield significant savings compared to purchasing multiple specialised machines.

Consider, for example, a single piece of equipment that can function both as an order picker and a pallet truck or a reach truck that can go beyond the warehouse to load and unload lorries outside. This versatility allows warehouses to accomplish a wider range of tasks with fewer machines, reducing capital expenditure and maintenance costs. It also optimises warehouse space, as fewer pieces of equipment mean more room for inventory or other operational needs.

Furthermore, versatile equipment provides operational flexibility. As business needs change or seasonal demands fluctuate, having adaptable machinery allows warehouses to quickly pivot without the need for additional investments. This agility can be a crucial factor in maintaining efficiency and controlling costs in a dynamic business environment.



Operator Assistance Systems: Where safety meets savings

Safety is paramount in warehouse operations, but it's also intrinsically linked to cost management. Accidents and injuries not only pose risks to employee wellbeing but can also result in significant financial losses through damaged infrastructure, increased insurance premiums, and lost productivity. The economic cost of forklift accidents involving injured workers can be as high as [€34,000 in direct costs per injured worker and €130,000 in indirect costs](#).

This is where Operator Assistance Systems (OAS) come into play. These advanced technologies are designed to support operators in proper truck operation, thereby helping to reduce accidents, injuries, and equipment damage. By constantly monitoring truck performance and providing real-time feedback to operators, OAS is designed to alert users when they are operating equipment outside of set parameters so that they can take corrective measures, potentially mitigating the risk of costly incidents.

For instance, some systems can detect when a forklift is approaching a turn too quickly and automatically reduce speed to prevent tipping. Others use sensors to detect nearby pedestrians or obstacles, alerting the operator to potential collision risks. By warning users of potential accidents before they happen, these systems may help operators improve warehouse safety while also contributing to substantial cost savings over time.

Moreover, OAS can improve overall operational efficiency. By guiding operators towards optimal performance, these systems can increase productivity, reduce energy consumption, and minimise wear and tear on equipment. The cumulative effect of these improvements can lead to significant cost reductions across the board.

Tackling the labour challenge

Labour costs continue to be a significant concern for warehouse operations, driven by a shortage of skilled operators and the need to attract and retain talent. In the UK alone, the [number of forklift operators has dropped by 19.3% since 2019](#). In response, many companies are focusing on operator comfort.

Modern lift trucks and warehouse equipment are being designed with advanced ergonomic features that reduce operator fatigue and enhance comfort. These improvements include adjustable seating, intuitive controls, and reduced vibration levels. While these features might seem like luxuries, they play a crucial role in maintaining high levels of efficiency and safety.

A more comfortable working environment also helps to retain experienced operators, reducing the substantial costs associated with recruitment and training. By investing in equipment that prioritises operator comfort, warehouses can create a more appealing work environment, leading to higher job satisfaction and lower turnover rates.

Furthermore, comfortable operators tend to be more productive operators. Reduced fatigue may translate into fewer errors, higher efficiency, and less downtime. Over time, these improvements in productivity can offset the initial investment in ergonomic equipment, leading to long-term cost savings.



Energy solutions

Energy costs represent a significant expense for many warehouses, typically accounting for around [15% of a non-refrigerated warehouse's operating budget](#). Recent global events have further complicated the energy landscape, leading to price volatility and supply concerns. However, innovative power solutions are offering a path forward.

Lithium-ion battery technology is a key solution in the material handling industry. In certain applications, these advanced batteries may offer several advantages over traditional lead-acid batteries, many of which can translate directly into cost savings.

Firstly, some lithium-ion batteries deliver more usable energy per charge compared to their lead-acid counterparts. This increased energy efficiency means more operational time for every unit of electricity consumed, potentially leading to lower energy costs over time.

Secondly, lithium-ion batteries support opportunity charging – the ability to quickly recharge during short breaks without damaging the battery. This feature can significantly reduce downtime and boost overall productivity, as equipment can be kept in operation for longer periods without extended charging breaks.

There is also no need to allocate warehouse space for battery charging and storage, providing more usable workspace – a helpful cost saver when property prices are at a premium.

Maintenance is another area where lithium-ion technology shines. These batteries require virtually no maintenance compared to lead-acid batteries, which need regular watering and off-gassing. This reduction in maintenance not only helps cut direct costs but also increases equipment uptime.

While the initial investment in lithium-ion technology may be higher, the long-term benefits often outweigh the upfront costs. With their longer lifespan, faster charging capabilities, and reduced maintenance needs, lithium-ion batteries offer a sustainable and economical energy solution for modern warehouses.

Thin plate pure lead (TPPL) batteries present another promising alternative in the evolving energy landscape. Like lithium-ion, TPPL produces zero emissions and enables opportunity charging but offers a lower acquisition cost, attributes that make it a strong consideration as a lift truck power option for some warehouses.



The value of used equipment

While cutting-edge technology can offer significant benefits, it's not always necessary or feasible for every operation to invest in brand-new equipment. This is where the market for high-quality used equipment comes into play.

Opting for pre-owned equipment can be an excellent way to access reliable, efficient machinery at a fraction of the cost of new models. Good quality equipment is designed for longevity, meaning that even second-life machines can provide excellent value when properly maintained.

When considering used equipment, it's crucial to choose reputable suppliers who thoroughly inspect and/or refurbish their stock. Many offer warranties on used equipment, providing peace of mind and protection against unexpected issues.

Used equipment can be particularly beneficial for smaller operations or those looking to expand their fleet without incurring significant capital expenses. It allows businesses to access the equipment they need to grow and improve efficiency while adhering to budget constraints.

Bringing it all together

As warehouses and logistics operations continue to navigate the challenges of rising costs, a multi-faceted approach to cost reduction is essential. By leveraging advanced technologies like telemetry and operator assistance systems, investing in versatile and ergonomic equipment, embracing energy-efficient solutions like lithium-ion batteries, and considering high-quality used equipment, businesses can create a more efficient, safe, and cost-effective operation.

While the initial investments in some of these solutions may seem substantial, the long-term benefits often far outweigh the costs. Increased productivity, reduced downtime, improved safety, and lower operational expenses can lead to significant savings over time.

As you consider how to optimise your warehouse operations and reduce costs, it's worth exploring the full range of solutions available in the market. Yale Lift Truck Technologies offers a comprehensive portfolio of products and services designed to address these challenges head-on. From advanced telemetry systems like Yale Vision and versatile equipment to lithium-ion powered trucks and high-quality Yale Used options, Yale is at the forefront of developing real-world solutions for the complex challenges facing today's warehouse and intralogistics operations.

By carefully evaluating your needs and exploring the innovative solutions available, you can position your operation to not just survive but thrive in today's competitive business landscape.