

THE AUTO DEALER'S ORIGINAL FIXED OPERATIONS RESOURCE

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FIXED OPS

THE WHOLE (DEALERSHIP)
IS GREATER THAN
THE SUM OF ITS PARTS

COMPANIES
TO SEE AT NADA
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TURNING RECALLS INTO PROFIT

ARTIFICIAL INTELLIGENCE

BEWARE THE DISAPPEARING LOANERS

MISSING THE BOAT ON COLLISION REPAIR?

BUILDING A BETTER SERVICE AND PARTS DEPARTMENT

HOW VERTICAL STORAGE PROVIDES THE BEST FOUNDATION

BY DAVID PHILLIPS

As you know, car dealerships don't make their money solely based on how many shiny new cars they put on the road each month.

According to the National Automobile Dealers Association (NADA), new vehicles account for only about 30 percent of a dealership's gross profits and another 26 percent of profits are from used car sales. The big moneymaker for any car dealership isn't the vehicles themselves at all — it's the Service and Parts Departments, representing 44 percent of the gross profits.

Even though the Parts Department often does the heavy financial lifting at dealerships, it comes out on the short end of the stick when renovations are planned. That's because virtually all car dealerships have a finite amount of space.

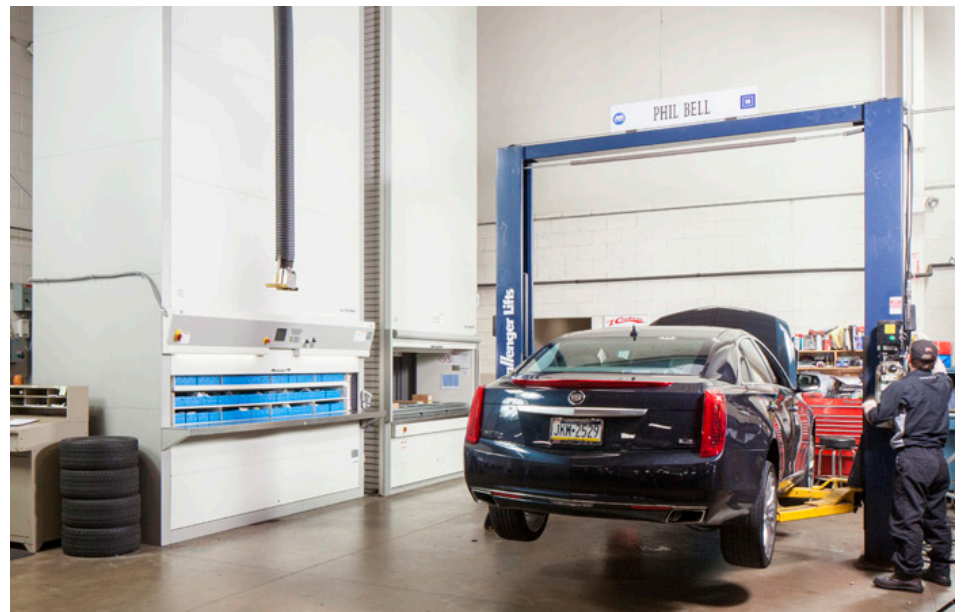
Vehicles, whether new or used, need to occupy most of a dealership's real estate and there usually isn't space left over for new construction. Dealership property is often hemmed in on all sides by other businesses or by hilly terrain not conducive to expansion.

If lateral expansion is impossible, going *up* is the only other option.

Saving Space

A common solution is an automated storage and retrieval system (ASRS) that allows dealerships to store their spare Parts vertically, in the space overhead that often goes unused.

These Parts systems resemble giant ATM machines and Parts are retrieved automatically by scanning, keying a product barcode or processing a repair order sent by a DMS system. Options such as vertical storage carousels and vertical lift modules can help a dealership reclaim at least 50 percent of its useable space, which can then be dedicated to other purposes.





Vertical storage means less reliance on standard shelving or racking, upon which items can only be stored to a certain height. Space is even wasted on the lower shelves, as items are rarely stacked up to the bottom of the shelves above them.

Although an increase in floor space can be very plain to see, an increase in productivity may not be as obvious. A productivity analysis can be performed to identify areas for potential improvement, based on the statistical data that is collected. This type of study pinpoints areas of delays and interruptions that cause the loss of productivity and reveals the exact percentage of time spent, saved and wasted on certain tasks.

Saving Time

The first step in any initiative that improves productivity is to understand the current state of affairs. Baseline indicators must first be established in order to determine possible improvements and cost savings. Reliable data is key to

determining productivity improvement goals, eliminating extraneous activities and estimating potential savings.

Hundreds of automotive dealerships have implemented this type of productivity analysis.

In one such study in Western Pennsylvania, the dealership's Parts Department processed several repair orders for a time comparison with and without vertical storage options. Three employees were involved in the study and none were required to climb stairs, which would automatically double their pick time. In order to be a fair comparison, the study only included stock items that could be stored in a vertical carousel.

In this example, the average pick time in the Parts Department using standard shelving was found to be 61 seconds. That's the time it took for one employee to search the shelves for one item and return with it to the Parts counter.

Conversely, the pick time using a vertical storage unit was found to be 40

seconds. Of that time, only 25 seconds were spent on searching the database for one item, while the other 15 seconds were spent waiting for the machine to deliver it. There was no return trip to the Parts counter, because the storage unit was in the same location.

Based on this time study and comparison, it was estimated that this dealership could achieve a 35 percent productivity savings. This means the organization could either reallocate 1.4 people from its Parts Department staff or increase the department's picking volume by 35 percent with the same amount of staff.

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Parts Department before...



...and after

It's important to note that each Service Department employee waited at the Parts counter until each repair order was completed, performing no other duties during that time. Because the time study only compared the sheer duration of the process of vertical storage versus no vertical storage, there may actually be additional productivity gains as employees perform other tasks.

In another scenario, a Parts runner could be utilized to deliver requested items to the Service Technician, which would enable them to service vehicles more quickly, rather than spending the time walking to and from the Parts Department to wait for their Parts.

Provided this arrangement is implemented, various productivity gains could be achieved. About two minutes could be saved per visit to the Parts Department (61 seconds at the Parts coun-

ter spent waiting and another 60 seconds for walking to and from the Parts counter) or, at the very least, replacing their time spent visiting the Parts counter with the use of an automated storage and retrieval system.

Either way, the additional productivity that could be gained by using vertical storage creates more revenue opportunities and further enhances the return on investment.

The productivity study also revealed that the equivalent of two hours per day were being spent manually reorganizing inventory, mainly because storage locations had been based on a sequential Part numbering and grouping system. Of all the ASRS options, a vertical lift module in particular automatically locates and stores inventory randomly while maximizing space so there is no need to constantly adjust by hand.

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Other Beneficial Factors

Several other return-on-investment factors were considered in this case study, most notably the increase of floor space.

The average space savings is 50 percent and the dealership in the study trimmed almost 1,800 square feet of space. An average of 400 square feet of savings at \$185 per square foot equates to \$74,000, so the \$150,000 cost of one vertical lift and its installation meant that the dealership was already halfway to the cost of a new unit. This helped the organization eliminate the need to add on for other dealership functions.

There was also a reduction or complete elimination of any need for employees to bend, extend, stoop and climb stairs or ladders, regardless of what type of items were included in an order. These repetitive actions can result in anything from a pulled muscle to a slipped disc, which can limit an employee's ability to work and can have a larger impact on dealership operations.

Employees are protected from and compensated for injuries that occur in the workplace and according to the Workers' Compensation Insurance Rating Bureau (WCIRB), injured employees may be entitled to one or more of benefits that include medical care, temporary disability benefits, permanent disability benefits, supplemental job displacement benefits and death benefits. These can be costly eventualities for an employer, so it's in a dealership's best interest that workplace injuries are as unlikely as possible.

The case study organization wrote off \$110,000 in inventory variance in the year prior to purchasing vertical lift modules for Parts storage. There had been an estimated 10 percent variance between physically counted inventory and the quantity in its computer records, despite the two hours spent counting up to six sections of shelving each week. Various other issues could also be significantly reduced or



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completely eliminated because of automatic inventory retrieval and storage processes that are inherent to vertical storage systems.

The average return on investment factors realized with other dealerships included a 70 percent increase in floor space, capability to redeploy or increase the productivity of Parts Department employees and increased inventory accuracy to between 98.3 and 99.7 percent. The latter represents the equivalent of over \$4,200 per year with an annual inventory of \$300,000.

In summary, car dealerships and other types of businesses typically consider automated storage and retrieval systems for several important reasons: for security, to eliminate inventory pilferage and to reduce or eliminate damage; to improve ergonomics that reduce or eliminate the risk of work-related injuries; and even for various tax credit purposes. So what are you waiting for?



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