Shopping and Airport Trolleys With FOUR Movable Wheels Really Piss Me Off!

Shôn Ellerton, December 31, 2025

Trolleys fitted with ALL wheels being movable is an ergonomic design failure. But until someone raises the issue, most of us just don't notice.

Have you ever noticed how some shopping carts and airport trolleys have either *two* or *four* movable wheels or castors depending on which country you're in?

I have.

I thought I'd write something trivial about this to end the year because I was struggling to move a shopping trolley laden with groceries across an uneven sloping brick paved area at one of my shopping centres. This area is in dire need of replacement but it's never been done in the history I've known the place.

Anyone knows that a heavy trolley with *four* movable castors is a pain in the ass to move around. Sure, it's great for shifting around in *little* spaces, but you know what it's like pushing an airport trolley fully laden with suitcases on uneven surfaces. You end up pushing the damned thing 'on the huck' to compensate for any slope. And when you're going around corners, it is *you* that has to move to the outer edge of the swing to stop it from careering into the wall.

So, *why* do they design trolleys like this?

I think, in large, nobody steps back and takes notice. I bet that most reading this haven't even considered this at all!

The reality is that those designers having four movable castors in mind were working in the space of more industrial applications like factory and warehouse floors for the movement of goods on ultra-smooth flat surfaces in very confined and busy conditions.

But using this same idea for the general public in general conditions is an ergonomic failure. Imagine a kids pedal-power cart designed with four movable wheels. It's not going to work very well, is it?

It doesn't seem to be a problem in the US where all trolleys I've encountered, apart from those in Ikea, have two front movable castors and two fixed castors at the back. But as soon as I go to Europe or Australia, it's those damned trolleys with *four* movable castors again.

There are only *three very minor* reasons for having trolleys with four movable castors.

Firstly, they are good for inching around very small spaces, which, in the grand scheme of things is not really important because, ultimately, you want to wheel the trolley to some distant location in the car park.

Secondly, is that it's a lot of fun for kids who like to drift-steer them into things and other bystanders or, even better, when adults push the trolley down the aisle with kids in it while giving it a spin or two, on the off-chance that there might be some empty space to do so without injuring some poor sod who gets in the way.

And thirdly, it might improve your stomach muscles while you try to correct its course with a heavy load going around corners.

Now, for those who have not experienced *both* two and four movable castors won't be appreciative of this piece, but I assure you, for the majority of applications requiring trolleys, *you don't need four movable castors!*

For Yanks who come over to Oz, they arrive at the airport and totally flip out when they feel that something ain't quite right with the trolley. It seems to move on its own accord. On any surface which isn't as flat as a mirror, you take your hands and eyes off the trolley for only a moment, and you realise it has taken a little ride of its own leading you to chase after it. Trolleys with two movable castors *can* move by itself, but it can only happen if all four castors are aligned *and* the slope is in the same direction as the back fixed castors.

However, I've heard of stories of those in the US having great fun using Ikea trolleys that have four movable castors because it's the only opportunity they have to push and spin a trolley around all at the same time carefully avoiding to hit any of the merchandise in the marketplace section. I think the Swedes didn't think that one through. After all, it's probably below the maturity level for Swedes to take part in this sort of behaviour!

For Europeans and Australians going to the US, using a trolley must suddenly feel refreshingly easy as that it's completely under their control. Imagine turning a corner with utter ease without stressing out one's abdominal regions. Heck, you can use *one* hand to push the trolley. Why not push *two* trolleys! It's actually quite easy to do. *You* are controlling the trolley rather than the *trolley* controlling you aided by the unwanted effects of gravity on sloping surfaces.

Now, here's a novel idea.

Why not supply trolleys with the *option* of fixing the back castors or not?

For example, if you have a *very* small little shop with *very* narrow aisles, perhaps it might be best to set all four castors movable. But for most cases, just lock the back castors and most people will be far happy with that.

And finally, here's a design feature I seldom see and which is so easy to implement.

A little rocker brake pedal which you can push with your feet at the back wheels to lock the trolley in place. I've been to a local shopping mall in which the entire car park is one big hill going down towards the adjacent street. I avoid this mall purely on the basis that I fear the safety of the paintwork of my car due to the possibility of a renegade trolley speeding down the hill because someone else wasn't keeping a careful eye on it. And it doesn't work by rotating the front castors against the direction because the two back ones will follow suit and the trolley will move sideways on its own.

To conclude this piece *and* the year of 2025, for any trolley designers out there, *please,* for the love of sanity, *fix* the back two castors *and* add the wheel pedal brake.

Trolleys with *four* movable castors and, especially, with no brakes is an ergonomic failure.

Trolley designers. Get your act together and get some practical sense into you.

And, most importantly of all, Happy New Year!