Friction is the Business

by Joe DeLuca

Dilating on a particularly problematic detail–the minutiae of it–is often the best way to get your arms around the bigger problem. In this case, the big problem is maximizing profit in a mobile sharing operation. The minutiae: rebalancing algorithms.

Call them recipes instead. That's what they are. Instructions: if station A is empty and station B is overflowing, move vehicles from B to A. Simple. Elegant. The kind of thing that works perfectly in a computer programmer’s head.

Then you turn the system on.

What the recipe doesn't account for: the driver who won't work Sundays, station B at the bottom of a one-way hill everyone avoids, customers leaving vehicles wherever they want. The recipe assumes a frictionless world. The world has friction.

Here's what actually happens: You deploy your sublime optimization on Monday. By Wednesday, your operations manager has a manual override system scribbled in the margins of a printed map. By Friday, the drivers are ignoring it entirely. By the following Monday, you're in a meeting trying to figure out why your utilization rates are declining even though the dashboard says they should be improving and your operations manager is talking like a man who's already quit but hasn't told anyone yet.

The math is perfect on paper. Which solves exactly zero real world problems.

That friction–the particular detail I mentioned at the start–is the thing. Driver availability, vehicle capacity, station accessibility, weather patterns, local events, maintenance windows. These aren't edge cases. They're the operation. A system that can't account for them isn't optimizing your fleet. It's optimizing a theoretical fleet that doesn't exist.

At Playmoove, we don't have to imagine what operational friction looks like. We run our own car sharing fleet in Cagliari–a city built on hills, flooded with tourists in summer, choked with construction, and governed by a particular kind of friction that could only be described as *Italian*. We built Playmoove because we needed it. Every constraint in the system is one we've hit ourselves.

Here's what dilating on this rebalancing failure reveals: the profit isn't in the recipe. It's in the friction.

Every vendor in this space sells optimization as if friction is a problem to solve. But friction isn't a problem—it's the business. The companies making money in mobile sharing aren't the ones with the most elegant math. They're the ones who understand that the operation is the friction. The money lives in how well you handle the Sunday driver shortage, the one-way hill problem, and the customer who parks wherever he pleases.