

Alexandra Magold

Good morning. My name is Alexandra Magold, and today Wan Chi Lau will tell us what food banks, cement trucks, surgical scheduling, theme parks and urban transportation have in common. Wan has been man of the first hour working for an exciting new startup called Mobi. Mobi is specialized in time constrained optimization. So Wan, what do food trucks and surgical scheduling and theme parks have in common? And how does Moby come into play?

Wan Chi Lau

Well, what they have in common is that the shape of the problems that they all have a very similar. They all have a lot of moving parts that have to come together in time and optimizing solutions for all of that are really too complicated to solve without the help of a computer. And the mobi platform is designed to come up with solutions very quickly.

So it's perfect for finding lots of different solutions, especially when you have parts that are changing dynamically or unexpectedly. So take the example of surgical scheduling.

A lot of times you can have a plan for what's going to happen during the day. But if the first surgery is delayed for some reason, complications, surgeons running late, machines not working, it impacts everything for the rest of the day.

And how do you make those shifts and how do you optimize what surgery should come next?

They impact a lot of different things, the surgeon may have other surgeries at other locations, patients may not be able to accommodate the changing schedule. And once obviously, once the surgery starts, you can't say, oh, we got to stop this and do something else. All right. So you just got to go through. So that kind of dynamic changes have a lot of consequences downstream.

This also is similar to something like dump trucks moving things from one place to another. Depending on the changing weather, certain kinds of aggregates may be impacted in certain ways. And you have to keep all of those things in mind as these things are moving through the system. The next load that you pick up may be different than what you originally had intended, because something that happened at the yard or a certain type of truck has broken down and you don't have a replacement for that particular type of truck.

For something like transit. Obviously, there are lots of options to get from one place to another. But depending on traffic conditions, you certain options may be better than others. While you're in transit, an example, would be. I'm planning on going to a Red Sox game and driving in and talking right at Fenway Park. But traffic is really heavy. I am going to, you know, be really late if I tried to drive in all the way. So shall I park further out in the suburbs and catch the T going in and then walking the rest of the way. Well, these kinds of solutions are dynamic and you can have a plan going in. But what you really want to know is as things change in real time, what are some of those optimal solutions that you could choose? And the mobi system is perfect for looking at things at a network level and to be able to come up of all of these options as things move in real time.

Alexandra Magold

Thank you so much, Wan. Have a great day, byeee.

Wan Chi Lau

Absolutely, you too.