Episode 4:

Mobility as a Service

I'm Kevin Chambers, Technologist with NCMM, The National Center for Mobility Management. And this is Conversations with Leaders, a podcast funded by NCMM. Check out our resources, aimed at mobility managers, at nc4mm.org.

Today we have the second of three segments where I interview Carol Schweiger on the white paper she authored regarding Mobility as a Service. Carol is the head of Schweiger Consulting based in Boston. Carol has been supporting transit agencies around the world for over 40 years and is nationally and internationally recognized in transportation technology consulting. Her wide-ranging and in-depth expertise is in several specialty areas, including technology strategies for public agencies, public transit technology, traveler information strategies and systems, and systems engineering. Now on to part two of the interview, where we focus on mobility as a service.

Kevin Chambers: Let's talk about mobility as a service.

Carol Schweiger: One of my favorite, very favorite topics. So the first thing I will say is, it's not an app. That's another pet peeve, I find that a lot of agencies say, we're already doing mobilities and service when in fact, it's a bit more complicated than an app. And they have to certainly part of it.

But I look at it more as a concept that provides a traveler with the best possible information about their alternatives, and makes it very easy for them to pay for a trip, no matter of what modes they're using. So in the early days of mobility as a service, it was a simply a concept. No one had built one. Nobody really understood what it was except where it was nice diagrams that explain conceptually, what it was supposed to be. And I think very fortunately, it came about at a time where not even public transit agencies, but other transportation agencies had technology that generated information about how they were operating in real time, and again, could provide this open data to the public. But here we're looking at much more of a multi modal picture.

So in defining mobility as a service, you'll find about 20 different definitions for it. But it really is given a traveler the ability to plan, to reserve if necessary, and to pay For a trip with one specific platform, so it's a one stop shop. But underlying the One Stop Shop is the hard work. And that's developing partnerships. I

think mobility as a service does not exist without the development of partnerships with mobility service providers.

And I, I always say, I feel very strongly that public transit needs to really be the backbone. And now that I am actually seeing real mobility as a service systems being developed, that partnership aspect is critical. None of those forays into mobility as a service would exist without those partnerships. And it's not only a partnership that a mobility service provider is, let's say, a public transit agency is looking to partner with a bike share, for example, it's not only that the bike share provides that mobility to people. It's also Is there any incentives that that bike share might provide to someone who is looking at a multi modal trip? Are there incentives they can provide? Are there rates, that they will specifically charge in a mobility as a service environment, rather than someone just walking up to a bike chair and paying for it and just using the bike, which of course is going to happen as well. But it's these partnerships.

To me, the roadmap, in order to get to mobility as a service does not happen overnight. There are challenges in developing partnerships. There's challenges in developing pricing, in how you offer that pricing to the public. There are not a lot of good examples of real mobility as a service systems that have been evaluated so that we understand how travel behavior made change as a result of offering mobility as a service. How do you evaluate a system like that? We've not had these kinds of partnership driven sort of systems in the past. And so now how do we actually evaluate them? How do we know if they're changing travel behavior? How do we develop incentives for people to use them? How do we connect them to the community?

The original concept of mobility as a service, which was developed as a master's thesis, as a student in Helsinki, he developed this concept. And I thought one of the strongest aspects of this concept is connecting people to their community, giving them the ability to get to education, to get to jobs, to get the health care, to get that entertainment, all the things that we need to have a full life. If we were able to provide a way for someone to understand all of their alternatives to travel to those activities, we would really be doing them a big disservice.

And in North America, we are still up against the single occupant vehicle. However, in a rural environment, we can turn that single occupant vehicle into a carpool, right and make the most use of that car. You often hear people in urban areas saying mobility as a service is really there because we want people to stop buying cars. We want them to stop driving civilized. Keep in vehicles, we're taking parking away. We want people to travel, we want them to use active travel modes. In rural areas, these things are all challenges. In a world setting mobility as a service does not would not have the same supply of services as an urban area might. But you might be able to capitalize on some services that have been around for 30 years, carpools, vanpools, those are extremely successful in rural areas, and they can continue to be and now we even have better technology to build those, and to provide incentives to people who want to operate those cars.

Kevin Chambers: Yeah, it's interesting, there's a, I hear a real strong contrast, you know, you open to the topic of mobility as a service, you know, with the emphatic statement, that it's not an app, and for a lot of people that's still you know, a primary lens through which they hear or think about mobility as a service. And that's still a significant part of the marketing among vendors who are offering tools for mobility as a

service. And so I'm hearing there's that contrast, you know, there's also I'll add also that there's the use of the acronym, which sounds very similar to software as a service, which is, I think, was kind of what is building on. So there's these multiple ingredients that are encouraging people to think about this from a technology viewpoint, what I hear you emphasizing is that there's a an institutional and a structural element that is really at the core, on top of which there's a bunch of other late layers. Yes, that are not correlators, but required layers. Right, one of which is technology.

Carol Schweiger: Exactly.

Kevin Chambers: Right. So it really wouldn't work without technology. But it's not most crucially about technology. I hear you emphasizing the partnerships, which is who is working together? What are the barriers between modes? What are the barriers to payment? What are the barriers to creating? And now you're here talking about incentive? Well, what are the barriers so that that switching from a bus to a bike share? What makes that easy, right? What makes somebody want to use the bike share in conjunction with a bus to the point where it feels and is economically cheaper than just having one's own car? Or taking a taxi like service? or what have you?

Carol Schweiger: Yeah, I think this seamless aspect of it is very important with the, you know, the customer facing side of it. But the partnership, part of it is you really can't have mobilities of service without that, but I kind of look at it. I have a Venn diagram that I use a lot when I talk about abilities of service. So one circle in my Venn diagram has three circles, but you certainly have more. One circle is the region or the area that wants to provide mobility as a service to their, you know, employers in every region to the residents in every region, anybody who's going to make a trip, any travel related organizations, and they have specific goals as a region. These days, there are more sort of environmental goals that deal with clean air, the carbon affects a number of other things. But there is a series of goals and objectives that a region has.

Then you have the traveler, and the traveler wants to know, where are my options? Do I need to jump in my car, you know, and go there alone and incur a cost that I typically don't understand. When I jump in my garden goes somewhere along, I need to make, you know, the area needs to make the travelers sort of painfully aware of what that cost is. Because it's hidden for the most part. The only thing that people typically think about is when they stop at the gas station. Other than that they don't remember how much they pay for insurance, and a series of other things that I won't go into, but the traveler wants to know what are my alternate when it is to go from point A to point B, and dependent on my goal in traveling, I may select one of those alternatives. However, my goal may not match the area's goal, for example, environmentally, it may not match that at all. And I'm actually seeing during COVID, here in the area where I live, a lot of people's still shying away from public transit, you know, they haven't gotten back to it yet. Right? So those two circles, the region or the area in the traveler, there's overlap there, where the goals are the same, but often times, they're not. And the traveler is going to make a decision and potentially use a mode or modes that go against the goals that the region has.

Then we have the mobility service providers who are providing mobility services in that area. And they have a set of goals of their own, which typically include someday they want to make money.

Kevin Chambers: Right, right. They need to be viable businesses, if they're private businesses, then even if you're a public entity, you still need to figure out how your expenses are going to match your income.

Carol Schweiger:

Exactly the point. And one of the biggest discussions right now in mobility as a service is the platform provider, software as a service provider, the entity that provides the platform for someone to use a mobility as a service system. Is that really going to be viable? We don't have the answer to that yet. If you look around the US industry, you'll see that most of those companies have been getting a fair amount of venture capital, that doesn't mean that they won't be profitable in the future. Right at the moment, it's not clear that they will be profitable in the long term, which then brings me back to the evaluation thing.

But to finish out my Venn diagram, that third circle of platform developer, or mobility service provider, bike, share, scooter, share car share, whatever, all the mobility providers are. What is the right balance in that Venn diagram, and where are the intersections between those three sort of major pieces of the puzzle?

Kevin Chambers: Yeah, I really hear that that makes a lot of sense. I mean, it sounds like when we're talking about partnerships, you know, building those relationships between the different entities, you know, whether it's transit, shared mobility providers, taxi companies, and the platform operator themselves, which could be separate from all of those, right, who's actually integrating all those different services, that they all need to be agreeing on what the goals are, right? And then there's a process of acknowledging the different incentives of each of the players. So it sounds like there's a really a very complex and fine tuned place for just analyzing how it's gonna work as a market.

Carol Schweiger: Well, you actually hit the nail on the head, because there are now some tools that have been developed for agencies to determine their readiness for mobility as a service. There was a significant effort in Australia very recently, where the Queensland Government, that part of Australia, actually had a tool built that agencies can use to determine their readiness to sort of enter this mobility as a service sort of world. And what are the things that they need to be looking at how ready will they be? And if you take that, together with the topology of mobility as a service, which was developed, probably getting close to five years ago, Which shows mobility as a service at different levels.

So level zero is kind of what we have today where if you want to take a multi modal trip, you've got to investigate each mode separately, you have to pay for it separately, nothing is together in one place. Level One is where you integrate all of the planning portion, you know, the itinerary can where you will see what all the modes are, and how they might work together. The next level is incorporating payment, which from a technology perspective is one of the most difficult things to do in mobility as a service. And then you move into to other levels, which really deal with governance. And governance is something that we are now talking about a lot more than we did, since these systems really did not exist at that level. Going back several years.

Kevin Chambers; Yeah, we'll put links in for this MaaS readiness tool, and make sure that everyone has access to that. So similarly to open data, there's a lot of there's a lot of elements that are not obvious in

order to successful, right. They're under the hood, they're under the hood, you know, and it's clear that there's needs to be, if you're if you want the technology, you need to do the work on the infrastructure, you need to have those under the hood elements in place. And so that's the recurring theme here around technology, when it comes to transit is that the technology can be great, the technology can help make things work better, they can reduce friction for the user, and increase access. But only after you have those things in place.

Kevin Chambers: That concludes part 2 of this three-part series with Carol Schweiger. In part 3, we will talk with Carol about autonomous vehicles. Thanks for listening!

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