Auto Physical Damage

Episode 9: The EV Revolution and What's Next for the Auto Insurance Industry

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Ryan is joined by Damon Aldrich, Enterprise Holdings' director of EV and infrastructure strategy, for an in-depth discussion on vehicle electrification. Together, they detail how the increase in EV adoption is affecting insurers, auto body shops and even rental car companies. They also identify what factors could hinder future EV market growth and prevent this segment of the car parc from reaching industry projections.

Ryan Mandell: Welcome back to the Mitchell Collision Podcast. I'm your host, Ryan Mandell, and today we're going to be talking about electrification and the rise of EV adoption. You know, we just had an interesting announcement today from Volkswagen saying that they're investing $193 billion into their business, two thirds of which is being dedicated to electrification and digitalization—a pretty big investment by one of the world's largest global auto manufacturers. With us today to discuss this subject a little bit more is Damon Aldrich. He's the director of electric vehicle and infrastructure strategy for Enterprise Holdings. Damon, it's great to have you on the show today.

Damon Aldrich: Thanks for having me, Ryan. It's great to be here.

Ryan Mandell: I think this is just a really interesting topic, right now, and it seems like this is something that is changing so rapidly and there are always new developments taking place every single week. Before we get into

this, maybe just give everyone a little bit of background about your history in the industry and what you focus on right now for Enterprise.

Damon Aldrich: Well, way back in 1999, I started with Toyota—back then, Toyota Motor Sales—at their headquarters in Torrance. And that's really where I became fascinated with electrified vehicles, that first generation Prius and the 2000-2001 era was where it kind of all began for me personally. But as a part of rotational opportunities through several management positions, I came to love the art and the science of how to introduce something new. It was always and it just really continues to be a learning experience in how to lead change. And a good example of that was the second gen RAV4 that launched in 2013. Everyone was intrigued. But they were also worried all about the same things we discuss about EVs today. And directly after that, I also joined Green Lots, which was a startup in the infrastructure space, which later was purchased by Shell. Then on to Burns & McDonnell, where I implemented medium- and heavy-duty infrastructure and then finally in the last 18 months, here with Enterprise. So it's been a great journey and a really exciting one that just changes every single day.

Ryan Mandell: I think when we're thinking about electrification, to me, this is the biggest disruption that we've seen in the auto industry in our lifetimes. You know, this move to a completely different propulsion system. So with your role at Enterprise, what are the things that you're kind of keeping an eye on and how does that translate to the business for Enterprise Holdings in general?

Damon Aldrich: It truly is a revolution. It's a very different type of product just, really, fundamentally. And what we noticed right away was that we have a very diverse business with lots and lots of different use cases and the market moving very unevenly. There was kind of a more obvious place for us to start. We know, for example, that the rental use case is probably the most challenging use case out there in terms of electrification. A lot of that really coming down to charging anxiety and range anxiety of who would be customers that may not be familiar with electric vehicles. So that really being the more difficult use case, we noted that in the Enterprise fleet management ecosystem a much easier, much more I would say ready use case for electrification there—where you have depot charging, a combination of factors really around vehicle suitability where there are vehicles that are suitable for a certain use, kind of lend themselves to a straighter path, an easier path to electrification, both operationally and to satisfy customer needs. But the focus for us certainly was around infrastructure first and foremost. That's really a big, big takeaway for us.

Ryan Mandell: That makes a ton of sense. And I think when we look at this, you know, obviously we're kind of coming out from the collision repair and auto insurance perspective, and I'd imagine that's got to be something that Enterprise has to take into account in terms of how this is going to impact the workflows of these different industries that you serve.

Damon Aldrich: That's right. I mean, I would really kind of take that and say this this propulsion change kind of factors in in a couple of different ways. But I'd break it down maybe into two different points. One is EV design and then secondarily, the skills and the knowledge that's required for EVs. So what gets damaged and how it gets damaged are really different in EVs because of how they're built. You can take a look at fundamentally 40% of the value is attributed to the traction battery itself, and that makes the vehicle really heavy. And that battery, of course, is subject to some impact in terms of a collision. And understanding what happened to that battery is, of course, you know, can be a really big concern. And there are a lot of folks working in that space. But that's certainly a big concern. They also tend to be software-defined vehicles with lots of sensors that enable content, ADAS, that advanced driver assistance systems. There's a lot that can get damaged. Also EVs are assembled by OEMs much differently than ICE vehicles now. And there's this big trend headed toward mega casting or giga casting, as Tesla has called it. What impact that may have on repairability, I think, is yet to be seen. But there are lots and lots of impacts approaching and some lessons learned that we're developing and what we'd like to share with the industry is around pacing. You know, the pace of the change that's developing out of all of this, what we

know versus what we don't know and so on. And that's where we like to partner and that's where we like to share our knowledge.

Ryan Mandell: Yeah, I think that makes a ton of sense. And you brought up a ton of interesting points there. I think that the battery is such a critical part of how that vehicle is designed, and it's all designed around that battery. And obviously, you know, that's going to evolve over time. But do you see any changes in terms of how this affects the dynamics of a collision repair? There's a change in the center of gravity. You know, you don't have this big, huge, clunky engine up front. Now you have this battery that kind of has a more evenly dispersed weight. Do you have any opinions on what that might do to what happens to these vehicles when they're involved in an accident?

Damon Aldrich: The diagnostic tools and the diagnostic knowledge and skills involved in any of this is really an area of focus for Enterprise and, I think, for the industry—especially during a time when the total percent of the car parc is still around 1%, maybe even less of total vehicles. There's still a tremendous draw on a need to have that knowledge and that skill set in a shop, in an operation so that trust can be built with customers and customers feel comfortable taking their vehicle to a repair shop given that there is not widespread knowledge yet on how to repair EVs. So that's really a big focus area for everyone in the industry and, I think, it will be that case for some time to come.

Ryan Mandell: It's funny, it feels like EVs are everywhere right now, but yet it's still a very nascent segment of the industry. And, you know, we're really only a good ten years or so into this becoming “mainstream”. And so I think there's still a big learning curve, even among experienced shop owners and people who've been in the industry for a while and worked on these vehicles. It still seems like there's a lot of question marks around what are the proper ways to repair these vehicles, how to protect people in the shop, and how to protect the end consumer as well.

Damon Aldrich: That's right. And it will be a factor for resale value, the health of batteries and just having information and data on the quality of used vehicles in the marketplace for sure.

Ryan Mandell: And I think that's going to be one of the takeaways as we move forward is we're not going to be able in the future to just lump all EVs together and say well, you know, we can just look at this segment solely on its own. It's really going to take further segmentation, I think.

Damon Aldrich: That's right. And supply chains will be a big part of that as well. You know, everyone is used to who drives an ICE vehicle today, being able to take your vehicle into a dealership and experience what would be kind of that normal service relationship. And that is really changing in terms of some business models being much more direct to consumer and just fundamentally different in terms of number of parts that have to be managed in a supply chain. How long does that take to arrive at a service center? We're certainly in a big, big time of upheaval and change in that regard.

Ryan Mandell: I think a lot of these parts are new to the Tier One manufacturers. It's not just the same type of platform for manufacturing that they've been doing for years. Many of these parts are drastically re-engineered over how an ICE part is just simply because of the lack of moving components in an EV. So I would imagine that's got to affect the supply chain, too, in terms of just bringing new manufacturers into the fold and trying to ramp up operations.

Damon Aldrich: Yeah, you have to think as a consumer. What a great thing, right? There's so much less interval maintenance, no fluids to speak of. You have 200 moving parts or thereabouts in an ICE vehicle compared to maybe 20 in your average EV. It's just fundamental change. Really, an EV, it looks and acts like a like a car in many ways, but it ends up really being almost like an electric appliance in many other ways. And so the bits and pieces end up being so highly digitized that really, again, going back to diagnostic tools and knowledge and

skills, really kind of rising to the forefront in terms of what's important here and making sure that there's access to the right kind of data in order to actually perform a repair on an EV.

Ryan Mandell: But how do you think this is going to impact collision replacement rentals? And we've heard already some just, you know, anecdotal evidence from certain insurance carriers about customers driving an EV, they get into an accident and their car needs to get repaired. For their rental replacement, they're expecting—especially if it's a third party—they're expecting a like vehicle. They're expecting an EV as well. Is that something that Enterprise is looking into in terms of how that's going to affect the dynamics of that collision replacement market moving forward?

Damon Aldrich: Well, we're certainly ready, I would say, to pivot when that becomes a greater and greater issue. I would say that the early adopters seem much more apt to need a like for like. If you're driving, you know, a particular EV, to get into another EV seems pretty natural, especially if you have your charging situation all figured out. A different matter entirely if you were to go from an ICE vehicle into an EV if you didn't already have one. So you remove really the education component there or that possibility of having a knowledge gap on behalf of the driver, which is pretty important. So we don't see a tremendous amount of activity in this area yet, but we're definitely in conversation with our insurance partners to know when we need to kind of change the trajectory on that when we need to.

Ryan Mandell: And I'm sure that'll be market specific. I mean, it's going to look different in Southern California than it is in North Dakota, for instance.

Damon Aldrich: We see big regional differences in terms of the uptake in EVs and adoption. Absolutely. I mean, say for example, in California, we're nearly 20% new vehicle registrations of EVs in California. Now that's straight, you know, BEV. And then there are other parts of the country much, much less. Obviously, Florida, Texas and the Eastern Seaboard also kind of follow suit. So, yeah, where we have really high EV penetration rates, it seems logical that our customers in the collision repair space and insurance space would follow suit as well.

Ryan Mandell: I think, you know, Mitchell included, we see this rapid increase in adoption and we're tracking that regularly and we've been speaking to clients about that for a long time. What are some of the roadblocks that you might see that could hamper this pace of adoption? I see forecasts that show roughly, the kind of median seems to be around 10% of the car parc by 2035. What are some things that might disrupt that or might kind of throw a wrench into that adoption forecast?

Damon Aldrich: We're seeing some signs now of some financial distress and that higher inflation, those higher interest rates, they put pressure on suppliers. And that's one concern or one worry that we're tracking for supply chain. Right? And supply chains then affecting vehicle availability, which was and has been the last couple of years. Then a little bit of an issue in terms of being able to even get an EV in the first place. So that's definitely hindered adoption to some great degree. We also see, you know, charging infrastructure itself—especially the public charging infrastructure—hindering adoption to some great degree. J.D. Power has been studying public infrastructure for the last two years, and each successive quarter that they've reported on it, the quality, reliability, availability of public charging infrastructure has been diminishing and that's been a major pain point for the potential customers of EVs, and they're taking note of that. Our customers are affected disproportionately simply because when they're on rent, that's where they're going to depend on being able to fuel their vehicle, so to speak. That will have, we're hoping it won't, but that will have ultimately some effect on adoption if it's not addressed timely. Now, there are a lot of mitigations in place now. There's the NEVI program among many, many others especially in California. But that really does need to pick up pace and match the pacing of EV penetration, too, to ensure that adoption continues on track.

Ryan Mandell: Do you think there's any opportunity or do you see any chance of consolidation happening with maybe some of these more distressed startups going through some of these troubles where they're having financial issues, but they have a great product? Is there an opportunity for legacy OEMs to kind of step in and maybe work some sort of consolidation deal to pick up some of that market share?

Damon Aldrich: That's such a great question because we're seeing a tremendous amount of consolidation on the EV infrastructure front and a tremendous number of acquisitions where the OEMs are actually buying infrastructure companies and technology products. Notably there was Electrify that was purchased by Ford that then turned into Ford Pro and then even amongst the big oils and C-store companies, that's certainly happening as well with British Petroleum, with BP's purchase of TravelCenters of America and so on. The bigger picture industry is certainly on a consolidation push.

Ryan Mandell: I just want to say thank you for taking some time with us today. I know this is a topic that I get asked about all the time, and it's supremely important to our customers, both on the collision repair side and the insurance side. So your insights are very much appreciated. Thank you so much for your time today.

Damon Aldrich: Thank you. It was great to be here.

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