



Episode 50: Mark Fields

Episode Transcript

Mik ([00:06](#)):

Hello, and welcome to the Mik + One Podcast, where I sit down with industry leaders to discuss the Project to Product movement. I'm Mik Kersten, chief technology officer of Planview and bestselling author of Project to Product: How to Survive and Thrive in the Age of Digital Disruption with the Flow Framework. Joining me today is an amazing business leader, Mark Fields. As the former president [CEO] of Ford Motor Company, Mark has presided over three decades of strategic and digital transformations at global businesses. Prior to his CEO role, Mark was chairman of the Premier Automotive Group, which included Lincoln, Aston Martin, Jaguar, Land Rover, and Volvo Cars.

([00:45](#)):

And prior to that, Mark had become the youngest person ever to run a major Japanese company when Ford placed him in charge of Mazda in 1998. Mark is now a senior advisor to TPG Capital and a member of Planview's board of directors. And thanks to that role, I have had the opportunity to work with Mark on our mission of connecting strategy and work across organizations. I am absolutely thrilled that Mark has taken the time to joining the podcast and to share with us his amazing journey and the many lessons that he has learned over the years, which I think are incredibly relevant to the challenges and opportunities that we are facing today. So with that, let's get started. Hello, Mark. Welcome to the Project to Product Podcast. It is just so great to have you here.

Mark Fields ([01:33](#)):

Well, I couldn't be more excited about spending some time with you, Mik.

Mik ([01:37](#)):

All right. And you and I have had some conversations just over the past few weeks and it's just been amazing to get a perspective from you of what you've accomplished in your career and how, of course, everything that you've created is now shifting more to digital, as well as actually the companies that you're supporting shifting more to digital into software.

([01:56](#)):

And I would just love us to start the conversation with the earlier steps in your career, because I think a lot of us listening to this podcast have been fascinated about what happened in Japan around the concepts of lean, and you, in fact, were the youngest CEO ever of a major Japanese company. So if you could just take us back and tell a bit of that story before we start talking supply chains and ECUs and other fun topics.

Mark Fields ([02:19](#)):

Absolutely. Well, I grew up in the New York, New Jersey area, and when I came out of business school, I was either going to go into tech, because prior to business school, I had worked at IBM and I had a number of offers from a number of the tech companies, mainly the hardware tech companies, but a couple of software tech companies, and an offer from Ford Motor Company. And I always loved cars, and I went out there to Detroit for a visit. I had never been to Detroit before, and I was really impressed with the people and the organization.

[\(02:56\)](#):

And I also kind of held the thought that somewhere down the road that cars were going to become very much like computers. Now, interestingly, I spent about 30 years at Ford, and probably that didn't happen till about the last, oh, plus or minus 10 years, but it eventually did happen. But one of the things I had the opportunity early in my career to do was to go and work overseas. And I didn't have a master plan of, "Hey, here's how I want my career to unfold."

[\(03:28\)](#):

I just took the approach of... Very simply, I always ran to the fire. And what I mean by that was, I always went to the assignments that, let's say, weren't very popular or had a lot of challenges in front of them, because my philosophy was I would learn a lot, and if it was successful, it would help my career. If it wasn't successful, well, I would've learned a lot.

[\(03:52\)](#):

And so, one of the assignments, I first went to Argentina, and then from there, I went to Mazda first as the global marketing and sales director and I was living in Hiroshima, Japan, and then a year later, I was named CEO of the company. And a lot of that had to do with no master plan but looking at opportunities where I could really learn and grow and take on challenges, and that's how I ended up overseas and that's how I ended up in Japan. It was a wonderful experience.

Mik [\(04:25\)](#):

And so, this is around 2000, so around the dot-com bubble?

Mark Fields [\(04:29\)](#):

Yeah. I came to Mazda back in '98. So Japan had been in the doldrums for quite some time economically. And when I joined Mazda, we actually were almost bankrupt because we had tried to copy the strategies of Nissan and Toyota, who were much bigger, had much more resources. So it was a case of our eyes were bigger than our stomachs in terms of what we could actually execute. And so, I was sent out there to first sort out the sales and marketing situation and then, secondly, how could we put together a profitable growth plan going forward.

Mik [\(05:11\)](#):

So you put together the turnaround for Mazda around this time?

Mark Fields [\(05:16\)](#):

Well, yeah. I let it, but... And let me be really clear. You only get things done through teams, through committed teams. And it was very interesting, being what's called a gaijin, which is a foreigner going into Japan. I couldn't just come in guns a-blazing saying, "Hey, here's my plan and I want you all to follow." My philosophy is always to first get the wisdom of the management team and then put a plan together that we all own. So it doesn't become Mark Fields' plan. It becomes the Mazda senior leadership plan.

[\(05:52\)](#):

And that was kind of difficult in Japan because it took me the first six months to just figure out communication styles, thinking styles, which are very different from the West, but what I essentially did was take my board, which was an internal board of just senior Mazda managing directors, of which there were about 20 of them, and I spent a number of weekends with them off-site just marinating them and ourselves in the reality of our situation.

[\(06:23\)](#):

And it was really important to do that because in traditional Japanese companies, the organizations are very siloed. So if the manufacturing managing director is doing his job, then, well, the company should have profit, or if the product development head is doing their job, then the company should have profit. But running an organization, there's many, many different elements of that that contribute to success. And so, getting all the management team fully educated on the business overall was really important and kind of counterintuitive culturally for the Japanese.

[\(07:02\)](#):

But as we went through that, we developed a plan. I had a point of view, because at the end of the day, in my view, when you lead, it should be a participatory process, but not necessarily always a democratic one. And we ended up with a plan that, first and foremost, was based on great product, and the team rallied around that and executed and we did quite well and put the company back on a firm footing.

Mik [\(07:30\)](#):

I think that's fascinating because we've got a lot of organizations obviously listening now who are trying to figure out how to transform. Right? And the transformation is, it's not a siloed activity. It's not like one function is misfiring. There are market conditions. As you said, Mazda had... Their strategy did not match the market at that point in time. So can you take us maybe through a little bit more detail? Because I think you've applied this repeatedly through your career, and I can imagine, in a more hierarchical organization, this would definitely be much harder.

[\(08:02\)](#):

I think we're seeing in the industry today all these divides and functional divides between business and technology and operations and so on, and a lot of people looking at how they can actually rally their company around transforming in a way that meets what the market needs today. So this must have been a massive undertaking given just entrenched labor costs and product lines and so on.

[\(08:26\)](#):

And Mark, if you could actually... because I've heard you say this multiple times in the past, is this product as a focus for how you're doing that. If you could speak a bit more to it, because I think, so often in these transformations, we're seeing just purely cost cutting as a focus or just purely changing the sourcing strategy, those sorts of things.

Mark Fields [\(08:42\)](#):

Mm-hmm.

Mik [\(08:43\)](#):

I'm sure you were dealing with all of those factors, but somehow you succeeded with a focus on product. So could you speak a bit more to that?

Mark Fields ([08:50](#)):

Well, I think whatever businesses you're in, the product or service, that's how you get customers. And I think, as a company, you must always understand that, because at the end of the day, if you don't have customers, then you're not going to be a successful enterprise, period. And so, when it came to the turnaround at Mazda, of course, elements of that has to be cost cutting, but you can't cost-cut your way to profitable growth. You have to have a very strong point of view of what I call where to play and how to win with your product or service.

([09:26](#)):

And so, what I did with my team, as I said, is I did something very unusual. I took a siloed organization and I stuck them all in rooms for multiple weekends, the senior leaders, all getting educated on the complete business and also understanding what were the things that we were really good at in product. And in Mazda, there was a Japanese term that meant a oneness between the driver and the road, and our engineers were world-class in delivering the feel, the driving feel of the road, directly through the steering wheel into the input for the driver.

([10:10](#)):

And that really became the core for us of what it differentiates us versus a Toyota or a Nissan or any other OEM, because those were the things that made us successful in the past with our customers. So in any business, you have to find that thing that you are really good at and what you think can differentiate you versus the competition. And so, from there, we developed... I'll give you an example. Back in the day, there's a product today called the Mazda3, and the old version of that was a very mundane kind of appliance-like product. And we had gotten away from our roots, as I said, to compete with the Toyotas and the Nissans and the Hondas of the world, where we just wanted volume, and we lost that product feel.

([11:04](#)):

And I can tell you story after story and all the brands I've had the good fortune to run, whether it's Mazda or Jaguar or Land Rover or Ford, et cetera, where we always had to refocus on what were the things that really differentiated our brand versus others and the things that customers value. And so, we put a plan together that had one part great product development with a product pipeline that was able to deliver on our promise, our brand promise, and one part cost reduction, because we needed to get more efficient. We had grown fat, so to speak, from our costs. And the other was organization, how are we going to organize to succeed?

([11:53](#)):

And I guess I'll just finish with what's... It's also very important to have a rallying cry in every company. In Mazda's case, the product that was the pride of the engineers going back, way back when, when we won Le Mans was the rotary engine.

Mik ([12:15](#)):

Right.

Mark Fields ([12:16](#)):

And that was a pride point. That was a pride point for the entire organization. And so, out of this expertise that we had with the driver of one with the road, we came up with a brand tagline called Zoom-Zoom, which translates into every language around the world. And that was the rallying cry and that was our go-to-market strategy that delivered, that we had product that delivered on that brand

promise. So clarity is so important, getting that management team together, breaking down silos, showing them the reality of the business, showing them how the business makes money, how we grow customers. Everybody gets a common understanding, and then developing a plan that delivers on that and that every senior manager can own.

Mik ([13:08](#)):

And so, you must have helped the team, and you, being part of it, developed this unified product vision around... And I remember Zoom. I think a lot of us remember and appreciate the Zoom-Zoom as well as the RX-6 and others, and what a marvel of engineering that was. So that's fascinating. So you were able to connect that unified vision back to the roots that the engineers related to.

Mark Fields ([13:33](#)):

Yeah. And I really worked with the product development team for them to codify what were the things from an engineering standpoint that allowed us to deliver this oneness with the road that the other OEMs weren't able to do. And interestingly, the other thing that... This was very unnatural for the Japanese managing directors, because when you get to a certain level in a Japanese company, like a managing director, you spend more of your time on maybe strategy or you're not really in the day-to-day and getting your hands dirty in the operations.

([14:15](#)):

I kind of turned that on its head for our organization, where I had terrific managing directors that I really reoriented them to getting back directly into the business. And the way I approached it was, I spent some time trying to get culturally literate, and I can't say I'm an expert on Japanese culture, having only spent four years living there, but the thing that's really important to them is legacy. And what I posed to them was, "Listen, what legacy do you want the next generation of Mazda workers to think about the company and our customers to think about us?"

([14:56](#)):

And so, it's part appealing to the... I always mix this up, the left and right side of the brain, but whichever one is the rational one, I try to appeal to that side with educating them on the business and what the realities were if we did not turn the company around, and the other side of the brain that controls creativity and emotions, and that was really around accessing this importance of legacy for the Japanese culture and building on something to lead for the next generation.

Mik ([15:29](#)):

Wow. So somehow, from this, you mentioned the Mazda3 program. So how did that accelerate things?

Mark Fields ([15:39](#)):

Well, it was interesting. We had a slogan that basically said, "No boring car." And that led to so many interesting product trade-offs. For example, when you look at the design of the vehicle and you look at where the rear of the hood meets to the trunk, and you could have a back seat with lots of headroom and it looks kind of square or box-ish, or you can have more of a rake to it, which maybe it compromises headroom a little bit in the rear, but boy, it makes that design a lot more dynamic and appealing.

([16:28](#)):

And so, we developed, from there, guidelines around our design, not only what does the front end or the front grille look like, but what do we want the silhouette of the vehicle to look like? And so, we codified a lot of things, whereas before, it was a little bit of seat-of-the-pants. And we didn't want to

codify it so much that it became cookie-cutter, because you want the engineers and the designers to have a degree of flexibility to use their creativity, but you don't want them coloring outside the lines all the time so that you end up with a product lineup that has no relation to one another and it doesn't look like a family.

(17:10):

So those were some of the things that we did with the team. And importantly, we spent a lot of time at the development track to benchmark versus the competition and ensure that our product really delivered on that brand promise consistently.

Mik (17:29):

And again, so the parallels are just amazing because, obviously, tech giants already have these design guidelines, these design systems. The successful, even, midsize tech companies and unicorns have put them in place as well, and I think this is something that's just emerging in enterprises today, but again, something that you clearly proved out was key. So this focus on product... The interesting thing about the Mazda3, and I have vague recollections of this, of it actually, because in the technology ecosystem, products are key and I think understanding product thinking, embracing product thinking, and creating these customer-driven missions, like Zoom-Zoom, is as important for a digital product. The other thing that's key is platforms. Right?

(18:09):

So I think maybe we can touch on plans being platforms because it's incredible what you've done in your career on that front, but you just reminded me that... I vaguely recall looking at... The first time I saw the C30, the Volvo C30, I thought, "Wow, that looks like a Mazda3." And then I started digging into it, and there actually are some platform similarities there. I've never actually heard that story. I'd love to hear how that came to be, because somehow the products you were building seem to have actually turned into platforms.

Mark Fields (18:36):

Well, in the auto industry, the platform or the chassis, what I would call the chassis of the vehicle, takes a lot of engineering to develop. It usually lasts anywhere from 10 to 12 years, and that platform is what the body sits on. And so, in the auto industry, scale is so important. And I'll give you an example. So when I came back from running Ford of Europe and all our luxury brands to run North America, as we were looking at the company, we had almost 29 different, unique platforms across the globe.

Mik (19:18):

Oh, wow.

Mark Fields (19:19):

And you can imagine the amount of engineering that needs to go into those platforms. So not only does it drive an extreme amount of cost and effort and engineering to keep those platform... not only develop them but to keep them fresh, but in the auto industry, scale is everything. So you could imagine the unique parts that went into those 27 different ones, and we could never get scale. So what we did was, we eventually shrunk the number of platforms in Ford from the 29, it was either 29 or 27, down to when I left, I think we had eight.

Mik (20:00):

Hmm.

Mark Fields ([20:01](#)):

And so, you could imagine the amount of efficiency that you get from that. Now, interestingly, and when you go to the organization and say, "Hey, we're going to commonize on platforms," every part of the Ford world said, "Yeah. We're all in agreement with that as long as we commonize on our platform," because they all say, "Oh, our customers are unique and they have unique preferences and things of that nature." Well, guess what, what we found was there were a lot more commonality across the world in terms of customer requirements than uniqueness.

([20:39](#)):

So we developed these platforms that were for use around the world, but we did leave a degree of freedom for some... Different markets have different driving characteristics. For example, in Europe, the road system there, et cetera, you really need dynamic driving capabilities in the vehicle, and also grippier braking, so to speak, whereas in the US, the roads are not as curvy, so to speak, a lot of straight-line driving, and it's okay to actually have a longer braking length than in Europe. So we left some capabilities to have maybe different brakes put on the vehicle. And even simple things. I mean, you're going to maybe find this funny, but when you recline your seat, there's different preferences between US and Europe.

([21:36](#)):

For example, in the US, people like levers. They like pulling a lever and the seat goes back. Well, in Europe, they like knobs. They like to turn something. And so, we allowed for some level of customization, but with the overarching theme of having a library of parts for the platform, which were not negotiable, because it was so important for savings both from a cost and timing standpoint, but also leaving a degree to allow the product to be customized for the localized needs. And I think that applies to every business these days because it's all about how do you get simplicity, whether you're doing a product, a service, software, or whatever, but still being able to deliver for the customer.

Mik ([22:28](#)):

Yeah. And I think in digital organizations, many are just wrapping their heads around the importance of these platform economics that you saw instantly, of course. I think they might be even more stark when you've got supply chains as complex as I can imagine. You would need to support 29 different platforms. So the one trend that we're seeing is, innovators are basically putting somewhere around half, so technology innovators like the tech giants or unicorns, around half of their investment to platforms because, of course, those then can be repurposed and leveraged in various ways by customer- and market-facing products.

Mark Fields ([23:04](#)):

Exactly.

Mik ([23:05](#)):

But Mark, this 3 platform, am I right in recalling that it actually spanned multiple vendors, OEMs as well, like Mazda, Ford, and Volvo?

Mark Fields ([23:13](#)):

Yeah. Yeah. As you can imagine, it was an interesting process. Right? We're getting agreement from the Ford folks, the Volvo folks, and the Mazda folks. But yeah, the Mazda3, the C30, the Focus, all came off a common platform, and there were trade-offs in terms of deliverability. I'll give you one trade-off which, again, is kind of interesting. So when we were designing the size of the engine bay, we had to make accommodations for Volvo, because part of Volvo's brand identity was safety. And so, they had very strict requirements on how much space between the engine, the engine bay wall that separates the driver from the engine compartment.

(24:05):

And so, we had to take that into account, and that was a trade-off for all the other brands, but that was nonnegotiable for Volvo, so we agreed to do that. There were other things that got commonized because it didn't deliver for any of the brand promise of any of the brands, but it allowed for commonization of parts and engineering which, through scale, brought the piece costs down and made the vehicle more affordable and more profitable.

(24:35):

And I'll give you another example of where it doesn't work. So when we were developing the Range Rover Sport back in, I don't know, 2002, 2003, it was suggested from our Ford colleagues that, "Well, for that product, we should use the Explorer platform." Obviously, Explorer, very successful in the US, but as we had codified our product policy and our brand deliverables for Land Rover and Range Rover, we said, "The ability to climb a mountain or incline, at least at a 30- to 35-degree incline, was extremely important." Not that majority of our customers ever did that, but that is what was delivered the brand promise for Land Rover, and that also what allowed us to price for that.

(25:29):

Unfortunately, the Explorer platform didn't have that capability, and despite the politicking and suggestions from our Ford colleagues, we decided not to use the Explorer platform, because it wouldn't have delivered on that brand promise and customers would've noticed, and you would've taken a withdrawal out of the brand bank for the Land Rover and Range Rover brands, which we weren't willing to do. That product had to deliver on our promise.

Mik (26:02):

Yeah. I mean, I think that, again, the parallels are so stark because I think... And this is what we see in effective technology companies, the value streams. Each of them has a customer mission to fulfill, and they will actually need to divert off platforms, off common platforms, if they can provide more value and more outcomes through moving off those.

Mark Fields (26:20):

But that's also... It's a double-edged sword, because what I've seen in software companies, and I've seen this also at Ford from a product standpoint, is customers will tell you how unique they are and they will tell you all the things that they need customized for their business, whether it's an ERP system or a CAD/CAM system or whatever.

(26:46):

And a lot of times, as you know, that drives... As a company trying to satisfy customers, we're always trying to be as forward-leaning as possible to do that, and what you end up with is, a lot of engineering that has to take place, a lot of software development, a lot of it unique. And ultimately, you might be able to give the customer 100% of what they want, but the ability then to maintain and update that over

time is not only burdensome on the company, or the software company, but it's hugely burdensome on the customer because they have to pay for that.

[\(27:22\)](#):

And so, if you ask the customer the question, "Do you really need that particular part of the software customized the way you want?" Just asking the question and saying, "Here's the trade-off for that." Right? It's either a trade-off in more affordability, but in the willingness to please the customer, complexity takes it on the chin, and I think, many times, it's as simple as asking the customer, are they willing for those trade-offs? And a lot of times, they're not willing, but they're still just as satisfied.

Mik [\(27:58\)](#):

Yeah. All I can think of now, Mark, is that car, the Homer, that Homer Simpson design, and we have plenty of digital products that look just like that that have similar rates of adoption.

Mark Fields [\(28:09\)](#):

Yeah. I get it. I remember the Simpsons episode on that. I was always laughing, because being a car guy, I was like, "Oh my gosh, they kind of nailed it."

Mik [\(28:20\)](#):

Well, and I think you're speaking that fundamental tension, which it's the role of leadership to support, of product management wanting to fulfill the needs of a certain customer or demographic, and, of course, that not having the right kind of economies of scale that platforms provide and trying to [inaudible 00:28:37].

Mark Fields [\(28:36\)](#):

Right. Exactly. Exactly.

Mik [\(28:38\)](#):

So let's switch now. Actually, we can keep going on approach angles. I had no idea that... That's an interesting story around the Sport.

Mark Fields [\(28:46\)](#):

Mm-hmm.

Mik [\(28:46\)](#):

I do remember when I was looking at... I was at the plant in Gaydon, Jaguar Land Rover, and they were putting together the new Defender, which I think has a 38-degree approach angle, which seems awfully steep to me, but I did have the opportunity to drive around in one of the test vehicles and then go into the prototyping facility, where they had the Defender completely unfolded and were running all the tests on all the ECUs. So you could see the wires from the seat heaters and all these things and all these racks of testing hardware, and it was a very large room.

[\(29:19\)](#):

So at that point, they said that it was 170 ECUs, I believe, roughly, or 160 that were going into that new generation of Defender. Right? I recently heard from BMW Group that their new i Series, the M40s and the like, they're getting, the iXes, now 300 million lines of code. You committed Ford yourself, I think, to

the electrification and then spending nearly \$5 billion on these electric vehicles like the Mach-E, which have similar, I think, amounts of complexity.

[\(29:49\)](#):

So can you just take us through... It just seems like such a... And this is where I think it's really similar to what's happening in tech. Right? We used to have all these servers and then data centers, and now so many organizations are needed to completely re-platform around cloud and around modern delivery practices. Any guidance for how to think of changes as fundamental as what you put forward with the Mach-E?

Mark Fields [\(30:14\)](#):

Yeah. I mean, it's a really interesting question, because a lot of this gets down to having a point of view on the future and then laying out what I call a technical cycle plan that gets you to that future that you have a point of view on. It may not be right, may not be wrong, but at least you'll have a point of view on the future. And let me give you an example. So the reason you have so many ECUs in vehicles today is, it's a vestige of how we developed vehicles, which was, okay, we'd develop a vehicle. It would have an engine on it. We'd have a number of ECUs.

[\(30:53\)](#):

When we wanted to add features, additional features, whether it's variable speed control or parking sensors or heated seats or name the features over time that we would add, the answer to that, given the electrical system we had, was, "Well, just add an ECU." And so, that's how you ended up with vehicles today that have wiring harnesses in them that look like alien, because they're big, they're thick, they have so many different wires coming out of them with the connectors that you need, et cetera. It's a little bit of a spaghetti junction, so to speak, but a lot of that had to do with the history on how we developed vehicles.

[\(31:41\)](#):

Now what's happening, and to your point, and I think I give Tesla a lot of credit for this because they took a central compute approach to the vehicle, and, of course, that requires a lot less ECUs, a lot less wiring harnesses. And so, what you're starting to see now is, all of the automakers come out with new electrical architectures that actually are taking essential compute approach.

[\(32:09\)](#):

And this is where if we would've had a point of view, let's say 10 years ago, that, hmm, there's going to be more and more features added to vehicles, put aside that we weren't even thinking about electrification at the time, combined with the fact that we knew that software was going to increase in terms of the content of the vehicle, I mean, 10 years ago, the average vehicle probably had less than a million lines of code. To your point that you mentioned earlier, a lot of vehicles now have anywhere from 200 to 300 million lines of code, and it's only going to go up.

Mik [\(32:42\)](#):

Which is more than our laptops by the way. I think macOS and Windows 10 or 11 are still under 40, 50.

Mark Fields [\(32:49\)](#):

Exactly. I mean, you're going from mechanical brakes and steering to drive-by-wire. Right?

Mik [\(32:54\)](#):

Yeah.

Mark Fields ([32:55](#)):

And so, software plays a really important piece in that. But if we had a point of view on the future, we probably would've come to the conclusion that, "You know what? This is unsustainable to continue to add ECUs to a system that's already complex." And so, the lesson learned there is, anybody looking at their product or service today and looking at the macro trends and saying, "Based on those macro trends, why do we think a technical plan is going to be necessary to deliver for those customers in the future?" you will get earlier to make those decisions than later, and that's what's happening with the auto industry right now. They're in the middle of this transition of changing electrical architectures, because just adding ECUs... Some vehicles have upwards of almost 1,000 ECUs, believe it or not.

Mik ([33:45](#)):

That's really hard to believe.

Mark Fields ([33:47](#)):

Yeah. And it's unsustainable in terms of complexity and software development.

Mik ([33:55](#)):

Yeah. It's electronic control units, for those not familiar with it, but I think, again, it's history rhyming in terms of what's happening in digital, where people are lifting and shifting applications into the clouds. These virtual machine images are like the ECUs and it's all just becoming a tangled mess. And probably, just like in the car, I do remember, with the growth of ECUs, there became concerns that, especially in electric platforms, it would just consume too much power.

Mark Fields ([34:21](#)):

Yup. Yup.

Mik ([34:21](#)):

This is turning into very big AWS bills and Azure bills for organizations who've not thought about their point of view and what their platform should look like.

Mark Fields ([34:32](#)):

That's a really great point, because in the car business, when you look at electrification, we look at how can we save every joule of energy in the vehicle, because it's all about range for the customer, et cetera, and even down to what kind of tires. What's the rolling resistance on the tires, right? So that you make the vehicle as efficient as possible. It's the same thing as you said. If you cut and paste from, let's say, an on-prem to a SaaS solution that sits in AWS or Azure or whatever, you're going to be eating up a lot of usage which costs money, whereas there's that old saying. You have to...

([35:14](#)):

In periods of self-reflection, in any business you're in, there's that old saying that said, "If you weren't in this business to begin with, what would you do?" And I think that's a really heavy question, but one that a lot of execs don't ask themselves, particularly in light of the macro trends that they see, because sometimes there's realities, right? There's, how much would it cost to re-platform something?

Mik ([35:41](#)):

Right.

Mark Fields ([35:41](#)):

A lot of money. And particularly if you're a public company and you're trying to meet earnings guidelines, et cetera, it's tough to make those decisions, but you have to look at it as not a one-year decision, but almost a three- to five-year decision for the future of the company, and then the decisions become easier and easier to explain to investors, et cetera.

Mik ([36:04](#)):

Yeah. And this is what strikes me that without that point of view on what the future is, I think... I was at the Detroit Auto Show. I had a chance to speak with my colleague, René Te-Strote, who's one of the characters, or the main character in Project to Product, and we walked around the floor and it really did seem like a lot of old architectures. Right? It was like the equivalent of BlackBerry phones rather than iPhones and new platforms with new digital experiences.

([36:27](#)):

And it's difficult because Tesla got a fresh start and they have demonstrated the value of a centralized platform running on one general-purpose computer. One of the most amazing things I witnessed, I think, around that or the most poignant was when it helped them navigate their chip shortage, to be able to create workarounds and software to deal with-

Mark Fields ([36:47](#)):

Exactly.

Mik ([36:47](#)):

... chip shortages they were seeing in hardware.

Mark Fields ([36:52](#)):

Or ordering a vehicle without the heated seat because they took it out because they needed to save the ECU.

Mik ([36:56](#)):

Yup. Yeah. The Model 3s don't have lumbar control or something like that because those ECUs weren't around, but they had the telemetry from the digital platform to know that those don't get used as much. Right?

Mark Fields ([37:09](#)):

That's such an important point. Right? In the car business, we have something called the low take rate list, which, in any vehicle, cars tend to be... The industry has tried to simplify over time, but the buildable combinations for any given model is quite complex, because when you think it's a great idea to add a certain feature, but the feature is taken on less than 5% of the orders, that's telling you something.

([37:37](#)):

And I think the same thing applies in the software business as well. And fundamentally having that plan, do, check, act loop to really understand how your customers are using your product and have you over-

engineered it, have you under-engineered it, or something in between is a really important hygiene factor.

Mik ([37:59](#)):

Yeah. And I think that's that power of digital... Adrian Cockcroft, I think one of the foremost cloud architects I know, created the Netflix cloud architecture. He said, "There's only one reason cloud is important," and it's to remove constraints in your plan, do, check, act loop or your OODA loop, observe, orient, decide, act loop. The same idea. We've got fast feedback from what's being used, what's not being used across your entire digital portfolio. So I guess the power of putting that into physical platforms now is just incredible, as Tesla has done, and I guess you would know having...

Mark Fields ([38:34](#)):

Yup. Absolutely.

Mik ([38:35](#)):

I believe you may have a lot more Teslas than anyone on the planet with that 100,000 Tesla order.

Mark Fields ([38:41](#)):

Yeah, at Hertz. Yeah. We wanted to take a first-mover advantage and show that we could electrify the rental car fleets, and it's also about being a first mover in learning how to manage electrified fleets. And that's another lesson learned for any business, which is, again, we took a point of view on the future and we said, "The industry and consumers are going towards electrification. How do we get out in front of it, not only from a consumer standpoint, but also just learnings?" because there's learnings along the way that could provide you quite a competitive advantage over others by being there first and learning from your mistakes. Right? I mean, I joked with you before, I have lots of experience, and experience is the name I give my mistakes. So I have lots of those, and the key is learning from them and not repeating them.

Mik ([39:36](#)):

Yeah. Wow. Yeah. Now Hertz will have a fundamental advantage in understanding how to manage electrical fleets that no one else will.

Mark Fields ([39:45](#)):

Exactly.

Mik ([39:45](#)):

Yeah. Yeah. First mover in learning. That's fascinating. And tell us, Mark, now because you're now on the board of some amazing companies like Qualcomm, like Tanium, so these very digital companies, including Planview. So tell us more about what that's been like, applying everything you've learned and all your mistakes to helping digital companies thrive.

Mark Fields ([40:07](#)):

Well, I think, first and foremost, it's making sure, again, getting back to what I mentioned earlier, that you have a very clear strategy to win. And it gets back to the fundamental question I mentioned earlier, which is understanding where to play and how to win. And many times, you'll pick as a company the

"where to play", and they won't ask the second question on how to win, or what do you have to believe for us to be successful?

[\(40:38\)](#):

And so, as I look at the companies that I have the good fortune and the honor of sitting on the boards now, it really comes down to clarity around that. I mean, obviously, in Qualcomm's case, terrific engineering, terrific organization that is continually to innovate in modems and SoC chips and things of that nature, and looking to expand that beyond just handsets. Right? They're growing in automotive. They're growing in IoT, et cetera, but really understanding that they're not just a supplier to the handset business. They're connecting to the intelligent edge now.

[\(41:20\)](#):

And so, understanding that strategy and clarity around it and then building your bets around that. You can't do everything. In a lot of companies, the hardest thing is not what you're going to do. The hardest thing is what you're not going to do, and that really gets down to resources, manpower, and financial, and then capabilities. And so, those things transcend any business, whether it's a technology-focused business, a manufacturing business, et cetera, but it's also then organizing for success around that.

[\(41:59\)](#):

If you are in a business that was primarily in one area, let's say, in Qualcomm's case, the handset area, and we're looking to grow in these adjacency areas, whether it's IoT or automotive, et cetera, sometimes you then have to organize fundamentally differently, because it gets back to that great saying from Peter Drucker, the management guru, who said, "Culture eats strategy for breakfast." Right? And structure has to follow strategy, not the other way around.

[\(42:33\)](#):

So we've had to make changes in the Qualcomm organization to represent that. Same thing in the Hertz business. Right? We're developing... The mobile app is core to our strategy going forward. So hiring the talent in application software development, which was not a core competency of Hertz. We've had to not only attract and recruit differently, but we've had to organize differently around how to be successful on the strategy that we've decided on.

Mik [\(43:09\)](#):

Yeah. And I think that point, because I think we hear so many people talk about that culture and understand that culture, but not put in place the organizational structure to support the strategy, which then enables the culture, because if your mobile team is often a corner in the bowels of IT under finance somewhere, they're not a first-class citizen, as I think we've seen in many places.

Mark Fields [\(43:30\)](#):

Exactly. And the culture thing, to me, it's very simple about communication. I'll give you an example. When we were at Ford and we made a lot of the investments in electrification and in autonomy, I spent a tremendous amount of time communicating to the organization and giving them context as to why. For example, why were we taking budgets away from our traditional ICE business and putting it towards this electrification? Because in the absence of giving them context, people say, "Hey." They react negatively to that, because you're taking resources away from them, versus educating them on, what is our point of view in the future? What are the big macro trends? And then communicating to them, "This is not moving from an old business to a new business. This is just moving to a bigger business."

[\(44:23\)](#):

And putting those things into context for people is so important, and you literally have to just overcommunicate. And it doesn't mean you give the speech once and everybody gets it. You have to give it over and over and over again so the organization has context and can understand where the company is heading, where they want to be successful, so that it doesn't become a zero-sum game for every single department in the company.

Mik ([44:51](#)):

Right. Mark, that's amazing. We are at time. I think I'm basically a tenth of the way through my questions for you. So to be continued at some point, I hope, but any closing thoughts for our listeners?

Mark Fields ([45:06](#)):

The only closing thoughts are, listen, the clock speed of the economy, consumers, geopolitics, everything is so much faster now, and the ability to be... And I know the term is overused. The ability to be agile, the ability to understand changes in the outside world and what does that mean for your business or your department or whatever is really important, and we're going to be going into a tough economic environment, in my view, over the next 12 to 18 months. Probably anybody under the age of 35 has not been through one.

([45:46](#)):

And that's why some of the things that I mentioned become so crucial to understand the context of what is going on in the outside world for your particular company or department being really clear on where you're heading and what it takes to be successful and understanding that you have that North Star because, listen, there's going to be good days where you take two steps forward and you and your teams are going to feel great, and there's going to be days where you take two steps backwards and you're going to want to put your head through the wall, but you can't live in the day. You have to have that destination in mind and know that you're going to have great days of getting there and you're going to have some challenging ones, but you're directionally heading in the right direction.

Mik ([46:26](#)):

And to your point on structuring for success, if the pace of change... I guess it's Jack Welch, and before, the Planview CEO Razat mentioned this on this podcast, actually. If the pace of change outside the organization exceeds inside,-

Mark Fields ([46:40](#)):

You're dying.

Mik ([46:40](#)):

... you're dying. Yeah.

Mark Fields ([46:42](#)):

Yeah.

Mik ([46:44](#)):

Mark, thank you so, so much. That was just amazing, and I think we're all very appreciative to you sharing your wisdom and your insights and your mistakes with us.

Mark Fields ([46:53](#)):

Thanks so much, Mik.

Mik ([46:58](#)):

Okay. Thank you to Mark Fields for sharing some of his amazing expertise with us today. For more, follow me in my journey on LinkedIn, Twitter, or using the hashtags #MikPlusOne or #ProjectToProduct. You can also find Mark on LinkedIn. I have a new episode every few weeks, so hit subscribe to join us again. You can also search for Project to Product to get the book, and remember that all author proceeds go to supporting women and minorities in technology. Also, don't forget to join the Flow Framework team on Slack, which you can find on flowframework.org. Until next time.