SDS PODCAST

EPISODE 956: FROM AGENT DEMO TO ENTERPRISE PRODUCT (WITH EASE!) FEAT. SALESFORCE'S TYLER CARLSON

Jon Krohn:	00:00	You've probably heard that building AI agents is easy now, and that's true for demos, but getting from prototype to production, that's where 90% of developers fail. Welcome to the SuperDataScience Podcast. I'm your host, Jon Krohn. Today's guest is Tyler Carlson, an SVP at Salesforce, who is head of product for AppExchange, which you can think of as their app store. We've partnered with Salesforce today to announce a comprehensive new platform called Agent Force 360, which provides an easy way to deploy secure and reliable agentic applications. Hear about this, and much more about age agentic applications in general in this great episode. Enjoyed
	00:38	Tyler, welcome to the SuperDataScience Podcast. Where are you calling in from today?
Tyler Carlson:	00:42	I'm in San Francisco. Hey Jon. Thanks for having me.
Jon Krohn:	00:45	Nice. Classic location for somebody working on agents, and you have quite a senior role in that regard. So you're at Salesforce, huge enterprise and you are their SVP head of product for something called AppExchange and Ecosystem. Can you parse that out for us a bit?
Tyler Carlson:	01:03	Yeah, so AppExchange is the app store for Salesforce. We launched the AppExchange 20 years ago. It was the first sort of enterprise app store for a SaaS product like this. Very famously, mark tells a story about going down to meet with Steve Jobs early on in the early days of Salesforce. And one of the things Steve told him he should do is build an app economy around the product. Mark up ended up procuring the app store domain and we never ended up using it. We focused, tested it and came up with the brand app exchange. So Mark tells a great story of going down when Steve launched the iPhone and giving him the app store branded domain to launch what would become the iTunes app store. So

we've been in this business for a very long time, building out amazing ecosystem of ISVs and companies and developers, building things that extend and make the Salesforce ecosystem. Great. So that's the second part of my title. I'm also responsible for building out the platform that we offer our ISVs to build on the APIs, the developer tooling, all of the capabilities that make our platform amazing destination to build apps, agents integrations to reach the 150,000 plus Salesforce customers.

Jon Krohn: 02:34   I did not know that story involving Steve Jobs. And so Mark, of course is still your CEO today, right?

Tyler Carlson: 02:39   Correct, yes.

Jon Krohn: 02:40   For our listeners who aren't aware of that famous name. Yeah. So if people are in Salesforce using AppExchange to build apps, are those typically or always going to have some kind of sales related focus?

Tyler Carlson: 02:56   It's a broad spectrum of things. So there's a handful of apps and integrations on the platform that are focused on extending the sort of core technology and apps that Salesforce offers, sales cloud service, cloud marketing, cloud commerce cloud, things like contract management, pricing, tooling, widgets that install into and make the implementation of those products better. But then there are also wholesale companies that have built an entire verticalized app for a particular industry that leverage the rails of the Salesforce platform to take advantage of everything we build to service the Salesforce apps. We're basically making that platform available to others to build apps on, and there are amazing businesses that have been created over the past 20 years building on the Salesforce platform that are also part of our ecosystem.

Jon Krohn: 03:57   Really cool. So if we have listeners out there thinking about building an app, whether it's sales related or not,

what are the kinds of reasons why they should be coming to the Salesforce app exchange to do that?

Tyler Carlson: 04:08   So the platform is really the core infrastructure that we build the Salesforce apps on. So it's an enterprise grade platform that we use to deliver sales, service, marketing, commerce, et cetera, at massive enterprise scale. And I think we're seeing, especially now, a lot of these entrepreneurs and developers starting up with really great ideas. They have these amazing ideas for applications that they can build and it's easier than ever to go from idea to sort of this prototype phase or even a working V one functional application and you can assemble a bunch of component parts out of Hyperscaler platforms, go to AWS or Google and build this stuff together. And for some engineering organizations at scale, that's the right decision to make. But a lot of the companies that are coming to us are those that want that availability security model foundational platform that is easily extensible and you can use to build these applications leveraging the last 25 years of investment that Salesforce has made in the infrastructure that runs our apps. And we offer that as effectively a platform as a service so you can build whatever you want on top of that platform and even embed now the full suite of products that we offer to our customers effectively white labeled under the hood. So you get this immense headstart basically taking advantage of all of the last 25 years of our r and d when you're building an app on the platform.

Jon Krohn: 05:48   So it sounds like reliability, security, these kinds of concerns are kind of taken care of out of the box. Does it support people writing code and pointing both?

Tyler Carlson: 05:59   It's a combination of all of the above. So we have an amazing low-code platform if that's the style of app that you want to build, you can define your objects and data model through wizzywig Schema Builder. You can write

workflow through a workflow builder we have called Flow that allows you to sort of lay it all out in an orchestrated fashion and do very sophisticated deterministic logic and workflow through that. You can write UI through drag and drop customization where we ship our own ui UI framework that you can leverage so you can build a fully functional application with low-code, but all of that capability we offer in a pro code fashion as well. So we have coding languages, you can write on the platform. We support Apex, which is our sort of java alike runtime for writing code, but you can also write now React and other frameworks on top of the Salesforce platform to build your application. So it's a mix of both and so customers are using all of that when they build an app on the platform.

Jon Krohn: 07:13 Really cool. And the reason why this podcast is partnering with Salesforce today is not just to tell our listeners about AppExchange, but to tell them about something called Agent Force 360 Tyler, what is that?

Tyler Carlson: 07:28 So Agent Force 360 is our platform really taken to the next level for building all kinds of workflows for the agentic enterprise, what we call it. And the main announcement that we made recently was not just that you could do this historical building apps on the platform that I just talked about, you can actually leverage the full power of Agent Force, which is our agent development platform to build applications for your customers. So you get all of the investment we've made over the last year in a sophisticated multi LLM planner service for reasoning and logic, a new scripting language that we've created for deterministic control over the way that agents interact with and work on things. The full contextual layer of Salesforce data model and metadata model, which gives that agent sort of business context and understanding and the security and permissions model and layer that we offer.

08:34   So it's really a fully complete platform for building or agentic enabled applications for the enterprise. And you get a whole bunch of the capabilities that we offer to our customers that are using it for building their own agents as part of the offering that you would then ship to your customers. So you get that core infrastructure, you get the security model, you get the observability and monitoring layer, you get all these things that are actually the hard part about getting from that prototype idea to the last mile of a production grade enterprise ready ag agentic application that you can ship to your customers and iterate and develop on over time.

Jon Krohn: 09:20   So for example, in 2025, we've heard a lot about model context, protocol MCP, but we've also heard that it isn't enterprise grade that doesn't have the kind of security that we need. So it sounds like the way that you've packaged up Agent Force 360 that it has these kinds of enterprise security and reliability concerns taken care of just like AppExchange does.

Tyler Carlson: 09:41   That's right. So you have this core platform, all of the work that we're doing to solve these really complex and hard problems of how do you give the agent the right access to the right data? Is it operating in a user context or sort of a broader enterprise context? What context should be shared, what shouldn't be shared based on different types of workflows? And then also all of that, the deterministic logic. I think one of the things that I think agent developers are learning as they're going through this process, it's really easy to build an agent demo. It's a lot harder to actually make that thing work in an enterprise context in the right repeatable way that is going to be required from your customers. So many of our customers, as we've started this process of building agents on the platform for service or sales use cases, a lot of the logic was being written in natural language.

10:36   It's like always do this, never do this. When this happens, then do this and these LLMs are really, really good. It's sort of these more non-deterministic style questions, but sometimes they struggle with that, always never if then this type logic and in an enterprise context, that's not really something that you want, you don't want the agent to 90% of the time do that task and then the other 10% of the time not. And so we spent a bunch of time developing what we call agent force script, which is a scripting dialogue that allows you to write that deterministic logic and have the agent sort of understand when there's freedom to sort of reason and execute and when it needs to take the rails that have already been pre delivered. And in the enterprise context, what you find is that a lot of that logic that's required to do those tasks is already existing in the applications like sales service marketing that they've already built or used from Salesforce. So it's a really powerful tool set that we're unlocking for developers to build on.

Jon Krohn: 11:48   Really cool. It sounds like this is something that allows people to go really quickly from prototype to something like a real world product that they can trust, which I expect a lot of our listeners when they're thinking about what AI product could I be building or AI feature, could I be building, especially if it has agents, probably a lot of the time you're thinking the hardest part is building a good prototype, but is that really what you're seeing? It seems like this kind of solution that you've built is great for going from once you have that prototype, having something in production.

Tyler Carlson: 12:23   Yeah, I think we definitely offer tools that make it easy to build prototypes to build agents. We have a product called Agent Force Vibes, which allows you to sort of vibe code these types of things on our platform. So we're very much leaning into that direction of getting from idea to V one is so much more compressed now than it has been in the

past, but the reality is that that last mile from V one or prototype to production grade ready to be rolled out to thousands or hundreds of thousands of users in an enterprise context is where the rubber hits the road. It's a lot harder to do that last mile than it is to get to the prototype. It used to take us a lot longer to get to prototype. So that LLMs and what we've done with Agentic and Vibe coding has compressed that timeline so significantly, but that last mile is still the really hard and challenging part. So this is really an attempt, but for us to leverage our platform to make that last mile easier for those that want to build on that platform.

Jon Krohn: 13:28 Yeah, it sounds powerful for sure. I would expect that most of our listeners, when they think about putting their application into production, they would think to go to AWS or GCP or Azure, why should they instead be considering Salesforce?

Tyler Carlson: 13:43 I think it's all dependent on the specific use case you're trying to deliver. I think in the context of the customers that we have building their apps on our platform, a lot of it is a combination of things. They want the app model and the structure of something like a SaaS application that also has this sort of agentic component with it. So we see these amazing companies that are spinning up building apps on the platform like a company called Harvest Path that is focused on the meat industry and they have built their SaaS application for ranchers and farmers to manage their cattle. All of these different very specific and niche functionality that's all of that is an application with workflow and context and then they're building this agent layer on top of it that allows for all of that to become part of a agent workflow.

14:45 And so if you've already built that app stack and it's running on AWS, yeah it probably makes sense to think about how you build something on top of what you've

already done. But we're seeing a lot of these new emergent sort of vertical companies that are like, I can go so much faster to that both app and agent layer when they build on top of this platform because giving them not just the build an agent but also build the underlying workflow and app infrastructure behind it in a very fast way. So that would be my main answer is I think it's not really an apples to apples comparison. If you're trying to build an app where you run the infrastructure all the way down to the server level and you have an engineering team that wants to manage uptime and security and all of that stuff, that's where you would go build on one of the hyperscaler platforms. But if you're a small development team or just a founder who wants to get an idea out to market, you can go a lot faster leveraging a platform like Salesforce.

Jon Krohn:	15:57	It sounds really cool. Moving a bit beyond just this Salesforce offering that we're discussing today kind of more generally to what you're seeing in the marketplace, what are some of the common mistakes that you see when innovators like the founder you just mentioned, maybe a founder with a small team, they want to get from prototype to production quickly. What are the common mistakes that they make when trying to commercialize Productionize ai?
Tyler Carlson:	16:20	I think a lot of people are too focused right now on what I would kind of call a distraction, which is sort of the LLMs, their performance. They want to use the best in class. And I think the reality is, especially in these sort of focused markets or things, it's really focus on what the job you're trying to solve for your customers is. And LLMs are an amazing tool, but they're not sort of a panacea. They're not going to solve every problem. You run into a lot of those last mile problems on deterministic versus non-deterministic logic, hallucinations, other things. And what we're finding is the reality with building a

commercialized AI application, it's no different than building any other product that you've ever had to build before. You really have to think about what are the requirements, what are the jobs to be done? How am I solving something unique for that market or that customer base?

17:17   And you don't necessarily have to use an LLM for every piece of that journey. And a lot of the tools that we've had at our disposal code for deterministic logic database structure for application objects and all of that standard security management permissions, all of that stuff is also part of the picture. And so I think too often I see people trying to just sort of look at an AI problem being like, I want into this hype and I want to join the AI train and focus on something really sexy in that idea. But there's still so many problems in little niches across the world that are ripe for someone to just build something to solve. And it doesn't have to be quite as maybe big AI problem as they might think it does.

Jon Krohn: 18:17   Yeah, I love that perspective on trying on the way to build a product. Right now I am currently experimenting with different product ideas and my going theory is to build something that one company is like, this is exactly what I need.

Tyler Carlson: 18:35   Just

Jon Krohn: 18:35   Really get in that niche, start there with some point solution, get it to be secure and reliable relatively quickly. It sounds like it could with Salesforce and have them be able to kick around with it if they're actually using it, you might be onto something and you can expand from there.

Tyler Carlson: 18:51   Yeah, it's a perfect, I mean the company that I mentioned, harvest Path family ranching business, and they built this application just to manage their own cattle and to

manage their own ranching business and figured that this problem was something unique to them that's sort of unique to this industry and they could figure out how to take that same concept and if they could solve the problem for themselves, they could solve it for others. So I think that's a very good way to think about it, which is really digging in on one very unique problem and figuring out how to solve it better than anyone else is solving it. And if you can do that, you have a business,

Jon Krohn: 19:33   Do you see AI agents replacing traditional traditional applications or are we going to be in a long phase over the coming years where we have both coexisting together?

Tyler Carlson: 19:43   I think the reality is agents are applications thinking about agents in the context of just you're sort of like an unfettered LLM with access to a bunch of data through MCP and that's going to somehow replace the need for deterministic workflow permissions, model database structures, structured and unstructured data. All of that stuff is deep in context that's required for those agents to do work. And the reality is, as you look at anyone doing AI agents at scale and at some level of sophistication, it's a multi LLM orchestrated application with tons of logic built in that determines when to use which LLM for what kind of task, when to use the non-deterministic LLM versus a deterministic task. Where is the data stored, what is the context, what's the permission model? I mean, that's an application to me. I think the reality is we're just going to start to see applications look very different than they did before, but I don't buy into this idea of agents versus applications and one's going to replace the other. I think you're going to see a harmonization and merging of all of that, sort of just what the future applications look like.

Jon Krohn:	21:06	Yeah, it makes perfect sense to me. So these agentic applications are still just applications with all of the same issues as before,
Tyler Carlson:	21:13	But
Jon Krohn:	21:13	Now you have LM supercharge in some cases being able to handle natural language fuzziness or other kinds of things that would've been magical just a year or two ago while simultaneously, of course if it's agentic, there has to be some level of autonomy where it's doing some kinds of tasks on its own. Alright, Tyler, this has been a great episode and our listeners wouldn't know this, but we did this without any retakes, which is pretty cool. Just straight on through conversation. Before I let you go, do you have a book recommendation for us?
Tyler Carlson:	21:45	So I'm a big fantasy novel nerd and I have been a huge fan of Brandon Sanderson for a very long time. I was just recently reading one of the new entrants to this is deep nerdy fantasy novel stuff of multi-thousand page novels all stacked together. But yeah, I don't have a specific book recommendation, but if you're into sci-fi fantasy and you want to take on maybe a multi-year reading project, branded Sanderson would be my recommendation for anyone listening. He's an amazing author, incredible world building, and some really cool premises and context in his books. It's awesome.
Jon Krohn:	22:30	Nice, great recommendation. Thank you. And for our listeners who now have been listening to this episode and love the idea of app exchange of agent force, how can they get started today? Where should they go and maybe how should they be following you for your personal thoughts? After this episode,
Tyler Carlson:	22:48	I would love for folks to follow me on LinkedIn. We share a lot about what we're doing on the app exchange and the

Salesforce platform there. I think easy place to get started with building on Salesforce is Trailhead. So we have a website, trailhead.salesforce.com. This is where you can go and get hands-on with the Salesforce platform. You can get free development environments, do a whole bunch of hands-on enablement and training. There's a bunch of content on there on how to get started building your first agent, building your first agent app, though it's a great resource to get started. If you're a deep technical nerd like I am, you probably could just drop into the developer documentation and start reading. That's another great place to get started. I love going and checking out the latest in our developer documentation. So those are two places that I would reference. And if you're not familiar with Salesforce, just go check out salesforce.com and see what we're all about and you'll learn more about Agent Force and what we're building for customers there.

Jon Krohn: 23:52   Nice. We'll, love links to salesforce.com. Of course, not a hard ERL to find, but also this trailhead salesforce.com is the beginning of a journey for folks who get to that trailhead. Really cool. Tyler, thank you so much for taking time out of your busy schedule today to chat with us and hopefully we can catch up with you again in the future and see how the journey's coming along.

Tyler Carlson: 24:13   Awesome. Thank you very much. John,

Jon Krohn: 24:18   I'm not sure, was a slick, informative episode with Tyler Carlson In it, Tyler covered how Agent Force 360 provides the infrastructure to take AI agents from prototype to enterprise grade production, including security observability and deterministic control through a scripting language called Agent Script. He also talked about how too many AI developers obsess over which LLM to use rather than focusing on the job their customers need done. And you don't even need an LLM for every piece of functionality anyway. He also talked about how

the future isn't agents versus applications. It's a harmonization where sophisticated agents are orchestrated applications with multiple LLMs permissions models and both deterministic and non-deterministic logic working together. I hope you enjoyed the conversation to be sure not to miss any of our exciting upcoming episodes. Subscribe to this podcast if you haven't already. But most importantly, I hope you'll just keep on listening. Until next time, keep on rocking it out there and I'm looking forward to enjoying another round of the Super Data Science Podcast with you very soon.