



Best Practices in Mobile Enterprise App Strategy, Development and Deployment

A Customer Conversation with Daimler Trucks North America

Recorded: December 9, 2011

TRANSCRIPT

Participants:

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Joanie Wexler: Hello and welcome to our discussion about best practices in mobile app strategy, development and deployment. My name is Joanie Wexler and I'm an analyst and editor who has followed the computer networking, mobile and wireless industries for many years. And I'm joined today by James Buschkamp, who is the Mobile Infrastructure Architect at Daimler Trucks North America. James has been instrumental in building out new mobile apps for his company that we'll get to hear about during our conversation. James tells me that he has quite extensive responsibility for the infrastructure, app deployment, app development, management and overall best practices surrounding the mobility environment at Daimler Trucks. So I'm hoping that if you're a listener just now embarking on getting your arms around mobile data and apps, James' experiences might provide some insight that will be of assistance to you.

And James and I are also joined by Ojas Rege, who is the Vice President of Products at MobileIron. MobileIron makes mobile device management solutions that Daimler uses. And James will detail how as we get into our discussion. Ojas will be able to tell us whether or not James' experiences and lessons seem to track with what he's seen in his other customer deployments.

So let's get started hearing James' story. James, I understand that you were intimately involved with developing and helping deploy and set up best practices for a Freightliner Sales Tool application that is mobile and developed for the iPad. Could you explain to me what that application is, who uses it and why you needed it?



James Buschkamp: The Freightliner Sales Tool is an iPad application that we deployed in February to our dealer network. The application itself was put in front of the dealers because we wanted to enter the vocational market in a big way. Each and every one of our vehicles that we've put on the road is a custom-built vehicle, and we wanted an easy, accessible device that would allow them to guide them through the build-out and selling process of that vehicle for our customers.

Joanie Wexler: And why did the application need to be mobile? Why was it developed for the iPad as opposed to some sort of PC platform?

James Buschkamp: The iPad had instant credibility with the US population and it had a vast number of our dealers and salespeople were familiar with the navigation through prior experience with Apple products. We also needed a platform that was very portable and would work with or without Internet connectivity, wireless or 3G.

Joanie Wexler: And my understanding, but correct me if I'm wrong, is that this application really represented Daimler Trucks North America's first foray into the mobile application development and deployment space; is that right?

James Buschkamp: Yes.

Joanie Wexler: So how did you approach kicking off this whole development effort, and did you plan your infrastructure and devices from the top down? Did you already have some sort of infrastructure in place? How did you go about getting started?

James Buschkamp: Well it all started with a good idea. And a good idea was to enter the vocational market. And initially when we decided we wanted to enter the vocational market, the problem we faced is our salespeople were great at selling on-highway vehicles and they weren't necessarily familiar or had experience with the Freightliner brand selling those vocational vehicles. So it started with an answer to a problem; the problem being we need to sell vocational trucks and we need to make it simple. The answer being a great application that guides them through that process.

Ojas Rege: James, what was really interesting for me when you first showed me the application several months ago was I could imagine your salesperson sitting next to the person who'd be buying these trucks, right, and almost, like, designing this truck on the fly. It created a real visual interface for the person you're selling to to understand what it is that they might be buying and just



felt like it was much more effective than paper based or desktop based mechanisms that you would have had.

Joanie Wexler: Could you tell us a little bit more about that; why it's a preferred method of getting the custom trucks designed than what you had been doing prior?

James Buschkamp: Sure; prior to launching the iPad application, most of our products were spec'ed out on a computer. And a computer basically sits on a desk. And creating a vehicle consisted of spec'ing out a very detailed system. And what that user could take home or that person buying that vehicle could take home was a brochure; a piece of paper; a very limited amount of data. The reason we found so much value in the iPad is it's a very accessible device. It's easy to sit up and use it. It's easy to stand next to somebody and use it. And it's easy to hand over to that customer.

And so some of the feedback we've gotten is that we can hand this application to a customer. The customer is already familiar with some of our vehicles so they can go in and they can spec that vehicle out. And one of the compelling responses that we got is they're building value in that vehicle because they chose that rear axle; they chose that 72-inch cab. And that creates an experience that allows them to see immediate value in what they're building in a very visual way; in a way that was never possible on a piece of paper or with a computer monitor.

Joanie Wexler: Understood. Interesting. Now from the Daimler perspective it sounds like perhaps this is the first application you had actually developed for a mobile platform. What, if any, challenges did you face in actually developing the Freightliner sales tool for the Apple iOS mobile operating system, which the iPad runs?

James Buschkamp: With the iPad it was a completely new platform that DTNA, Daimler Trucks North America, hadn't developed for prior. So we didn't have any in-house developers that could whip out an application for us. Some of the challenges that we ran into was deployment.

Joanie Wexler: And so, James, why did you choose to develop a native application as opposed to a web based application for this particular project?

James Buschkamp: Well, this use case was interesting in that the business wanted our dealers to be able to use this application anytime, anywhere; with wireless; without wireless. So the reason we quickly decided a native application would be



required is it could harbor vast amounts of documentation and information and all be available offline without any load times.

Joanie Wexler: That makes sense. Now when you selected the iPad mobile platform, it sounds as though that was pretty much the only viable tablet available to you in the timeframe that you were building the application. If you were to build the same application again today would you still choose the same platform? Why or why not?

James Buschkamp: If we were to go at this in 2011 I still believe we would be using the iOS platform in that the scope of devices that we would need to support is much more streamlined and much more black and white. The simple answer there is when you develop an application, screen size and where your graphics are going to be on that screen is very important. And the iOS platform, particularly the iPad, the two versions of iPad we have today have the same screen resolution, the same size. And Apple has been very careful on the devices that they've released to ensure future compatibility. The Android tablets that we see on the market today have almost every screen size I've ever ...encountered. So developing for those is much more difficult in that from a hardware standpoint, it's a much more fragmented environment.

Joanie Wexler: Yes. That said, though, were there any challenges for developing for iOS/iPad that you ran into just given the proprietary nature of the platform?

James Buschkamp: One of the issues that we ran into was deployment. Commonly our business would have our own infrastructure deploy applications to our dealers. Our dealers are franchises, and they own their own equipment. That gave an interesting spin on what we're allowed to do on the iOS platform. As you know, the iPad has a single app store for consumers. That single app store everybody knows as the App Store. What we were up against is changing our overall distribution model that we've used since the inception of the computer, which was we send you to a location that we own, we deploy that application safely and securely to your device and then provide continual updates ourselves. With the requirement of being able to deploy this application to devices that aren't direct employees of Daimler Trucks, or have their own iPad device, we were basically forced to put our app on the App Store.

So, many critical decisions had to be made on how we were going to, one, protect our come-to-market strategy and protect the data we care about most. When an app is on the App Store, anybody in that country that it's advertised can then download that app. So we answered that by creating in-app security.



You download our application and the first thing you're presented is a login. That login is per user and per device. And once you do log in, it then will call home and download the data that we care most about that we didn't want publicly available on the App Store.

Joanie Wexler: Would it be more desirable to have an internal enterprise app store than to use the Apple App Store as your distribution channel?

James Buschkamp: Absolutely. Based on our requirements of being able to use your own device and not being a direct employee of Daimler Trucks, the current terms and conditions doesn't allow us to go down that path.

Joanie Wexler: Okay. And when you were building this out and figuring out how to secure the use of the application with the login that you mentioned, did you have some best practices in mind as you started out? Did you build them as you went along? Could you describe what you ended up with as your general best practices for building, deploying, managing and securing mobile apps? And particularly as they might differ from the way, you know, you have been building and managing applications for traditional servers and desktops over the years.

James Buschkamp: So you talked about building, deploying, managing and securing. I can kind of break those up into separate answers.

Joanie Wexler: Okay.

James Buschkamp: Mobile platforms are changing and they're changing fast. Don't think the model you used for developing an app like you did for Windows XP or Windows Vista or Windows 7 is going to work in this space. Because this is a relatively new platform, new features and APIs are coming out multiple times a year. A commitment from stakeholders in that application needs to be very clear that frequent updates and future updates will be required.

The next piece I can speak about is deploying. Deploying is very important in that you know your scope. And what I mean is: is this going to be a public application? Is this going to be an in-house application or is it going to be both? With the Freightliner Sales Tool it really is both. Our district sales managers use it to talk to the dealers. The dealers use it to talk to their customers. So we needed to architect an app that would accommodate all of those use cases.



The other piece is managing. Managing your applications utilizing an MDM provider like MobileIron for an in-house use gives us an immense amount of data about our users, our devices, the apps that they've installed as well as an incredibly robust way to manage who has what. It's important to note that when building your application and when deploying your application and managing it, this often has to happen per user and per device. And so having granular control, whether you're using an in-house deployment method or an app store deployment method, it's important to know the scope.

Joanie Wexler: So, Ojas, James has described a bit about the general best practices he's been using for building, deploying and managing his new mobile app. How does that approach compare to what you tend to see across your customer base?

Ojas Rege: It's very similar to what we see across many other customers. There's one point that I did want to emphasize that James touched on, which is the pitfall that I do see some organizations falling into. And as James said, this is so fundamentally about the interaction with the user, right. And what we see in the best practice applications out there, like the Freightliner app, is the user experience is the number one consideration that the design and development team has when they're building the app. So they finalize and kind of figure out what the user experience is going to be first, and then based on that user experience, they then figure out the security mechanisms, the management and deployment mechanisms.

And one thing that was interesting is the Freightliner application actually won the app contest that we ran at our global MobileIron user conference a few months back. And, the two primary reasons why it did so well in that contest were, one, the user experience was so clean and the second is that it was so clearly tied to a business need that you guys had.

Joanie Wexler: And, James, how have you measured in any way the success of the Freightliner Sales Tool? For example, can you give us an idea of the reaction of your dealers in terms of their liking it, the levels of usage, their levels of acceptance, etcetera?

James Buschkamp: Well we started seeing the feedback from our users right from the very beginning. Ojas mentioned earlier how important it is to build that user experience. Part of the development of this application involved talking to our dealers directly, showing them sketches, showing up some light interactive models and what the app could be and using that feedback to build that user experience. Even before the application was released, in its early beta stages,



we got phone calls from dealers stating the power of having all of this data in one place so easily accessible.

Some of the other feedback that we've gotten is that it's allowed new employees and new salespeople to really dive into the vocational market; dive into our products and learn things that they never had access to before. Because there is so many hundreds of documents right at their fingertips, it allows them to access them anytime, anywhere.

Ojas Rege: James, one of the things that I'd love to hear from you is what the reaction of the rest of the organization has been to the Freightliner application?

James Buschkamp: The Freightliner Sales Tool has gotten a lot of visibility all across Daimler. We have business units in China and Germany and all over the world asking how we did it; how we built this application; how this application gets the data that it needs from our servers. What we've done is we've built some standard APIs on how our applications check in. If there's an app on the App Store, how is that app going to come back to us for authentication for data? And what we've done is built an infrastructure that's now being standardized all across the world to leverage site minder integration and build out an API that allows these mobile applications to call home to check in to get updated.

Ojas Rege: And what's interesting about that, Joanie, is that model that James just described is something we're seeing across other customers, too, which is you pick a process that's really important. You build a real world-class app and that ends up being the catalyst for a lot of the rest of your organization to start looking at apps and figuring out how they're going to use them.

Joanie Wexler: And one thing that I'm always curious about is how are enterprises organizing themselves organizationally to deal with mobility? Do you have such a group that's focused on mobility at Daimler Trucks?

James Buschkamp: So before we built the Freightliner Sales Tool, we really didn't have an established mobility group that could implement something like this app. That mobility group was kind of immediately pulled together based on the requirements of what we needed to do to build and deploy this application in less than six months.

Joanie Wexler: And who was part of that group?

James Buschkamp: Because this app reached so far into our organization, there were a lot of stakeholders. Nearly every product that Freightliner has is in this app. So we



needed representatives from the sales and marketing. We needed people from infrastructure, like myself, to determine how we were going to deliver updates, how we were going to deliver documents to this application. We needed, most importantly, the people using the application involved to ensure what we were building met what they hoped a tool like this could do.

Joanie Wexler: And is this group going to stay in place for the future or was it a onetime committee, so to speak, for this particular application?

James Buschkamp: Since our release of the Freightliner Sales Tool we've since released three updates for this application. So with the continuation of development for this app, we've really kept that core team together and have weekly calls and weekly update meetings, both with our customers—the people using this—as well as the core development team to ensure what we're doing next falls in line with what the customer—our dealers—would like.

Joanie Wexler: Excellent. Now Ojas, how does Daimler's organization compare to what you are seeing across the MobileIron customer base? Are you seeing any pattern emerge organizationally for mobility or is there a little bit of everything going on?

Ojas Rege: In 2011 there's been tremendous variability across organizations around how they're organizing around mobile. In some organizations we've seen folks from the desktop team take the lead. Sometimes it's been the messaging team. It's honestly been all over the map. Near the end of this year we did start to see structures pop up similar to what James was describing where there was – it could be a virtual team, if you will, or a matrix team, but that there was a mobility team. And usually when it's kicked off it's been because of a particular application, right, like the Freightliner app. In the conversations that I'm having these days with folks as they look at 2012, it does appear like many organizations are starting to build up a mobile center of excellence, and then figuring out how they staff that appropriately; where those folks come from and, honestly, what skills they need.

Joanie Wexler: And, James, at Daimler do you see that happening or what else is next on your agenda for 2012 and beyond in terms of mobility?

James Buschkamp: At Daimler Trucks in particular we are absolutely building out a mobility group that would include a committee to drive the overall mobile computing strategy; someone who understands the industry and can provide us some benchmarks and analysis; someone on the app development side; an architecture team, an app integration team. How do we integrate those apps to



the rest of our business? And then of course identity and security; how is that app going to interface with our business and remain secure? And of course the operations and management architecture group, which is what I'm part of.

Joanie Wexler: Any new apps in the hopper right now?

James Buschkamp: Well, we are actually just now releasing a similar Freightliner application for our Mexico location. The DVCM Sales Tool is now live and being used at a trade show, I believe this week, which will allow our colleagues down in Mexico to leverage a similar sort of application to sell to their particular market.

Joanie Wexler: So looking again to the future, James, can you describe what role you think mobility has throughout the entire Daimler company going forward and what are some of the plans in place to create and achieve a mobile strategy?

James Buschkamp: In the Daimler organization as a whole there's been an interest in more mobile applications and more mobile workflows; starting on the plant floor where our trucks are built, where our cars are built, all the way up to the boardroom where decisions are being made about what the future of our company holds and everywhere in between. Daimler is a very large organization with use cases that span from being in a coal mine and selling a vehicle to sitting in a boardroom and reviewing documents. Having a mobile device is critical moving forward in that it provides us a much more easy, agile and robust way to get the work and get the data that we need done.

Joanie Wexler: Are you planning on sticking with the same platform or are you bound and determined to support any kind of mobile platform that might be of interest to any of the various types of folks that you mentioned?

James Buschkamp: I think it all comes down to the use case and the scope of who's going to be using it. We're continually evaluating the mobile platforms, what works best for the user, and really letting the use case drive the platform that it's delivered to.

Joanie Wexler: And then what role will MobileIron play in all of this?

James Buschkamp: MobileIron is a critical piece to our infrastructure to allow our devices, many of which are all over the world on all sorts of different network connections, to enter our corporate firewalls in a safe, secure way and get the data that they need.



Joanie Wexler: So James, is Daimler doing anything with bring-your-own-device, or BYOD, support? I've heard you mention corporate-liable devices as part of your mobility environment. What about devices that individual employees might want to bring into the environment and use, part personal; part work?

James Buschkamp: Absolutely. We are doing a bring-your-own-device program. However, we're doing it very carefully. Some of the things you want to think about when putting corporate data on a user device is what does your particular region allow you to do? And the example I can give is we have much different laws all across the world in every country on who then becomes liable for that device when corporate data is on it.

Some of the things that you want to be mindful of when putting corporate data on device is what is the impact of having that data on that device for that user.

Joanie Wexler: And this is currently an issue that you're studying and working to figure out before you go with it in a large scale?

James Buschkamp: Absolutely. It's a continually evolving process that is really kind of new to the industry as a whole. And new technologies and new mobile platforms are answering those questions every single day to allow the corporations to determine the level of risk. It all comes down to how much risk are you willing to accept with your corporate data.

Joanie Wexler: It sounds like mobile apps is heating up in terms of being of quite importance to Daimler organization-wide. Going forward, what role do you think MDM platforms such as MobileIron's might play in your ability to scale your mobile environment?

James Buschkamp: One of the greatest things that MobileIron has going for them today is an amazing app store; an in-house app store. What that allows us to do is, per user, decide which apps that user can get and what level of access we're going to give that app in our organization. So MDM, and more specifically MobileIron, is critical to building out that corporate enterprise storefront.

Joanie Wexler: I want to thank James from Daimler and Ojas from MobileIron and our listeners for participating in this timely discussion of mobile application issues. And that wraps up our conversation for today.

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