



TomTom Enterprise

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List of MAIN speakers Company Job title

Anders Truelsen TomTom Enterprise Managing Director

ENTERPRISE Slide #1

Anders Truelsen

Enterprise Managing Director

So I'm Anders Truelsen. I'm heading up our business unit enterprise. I'm based out San Jose, at the heart of Silicon Valley and I will over the next 15 minutes go through with you what we are up to in the enterprise business unit space.

IMAGES Slide #2

In our business unit enterprise, we work with a lot of different type of companies and we are extremely pleased and proud that so many companies have selected TomTom as their trusted location partner. Whether that it for fleet logistics, web or mobile applications, on demand or ride sharing applications. But what a lot of people are not aware of:

1 Billion Slide #3

If you put all that usage together, it basically means that over a billion people can access our products every single day through all these different types of partnerships we have created over the years and that of course in itself is pretty amazing.

Go-to-Market Slide #4

So I want to go through with you to, you can say high-level go-to-market product areas. So the first one is uncompiled maps and traffic data and then later I'll go through our other product offering: the Maps API space. Let's start with uncompiled maps and traffic data.

IMAGES Slide #6

And I think the best way of looking at that and explaining that is you look at our maps in different layers. So whether that's space map, street maps, street names, points of interest like hotels, restaurants, traffic or navigation, all that comes together. But, as an application developer, you don't have to use all the different type of layers, so let's take an example. So if you want to create a store locator, you probably want to take the base map of the whole street network. You probably want to take the street names. You definitely want to take your own store from a point of interest and you put that together as your application for store locator. Let me give you another example, and in this example I will use Uber.

IMAGES Slide #7

So Uber is taking all the layers we have in our uncompiled maps and traffic. We put that in to the phone. Then Uber have decided that they wanted to create how their own map looks in terms of colours and how it behaves. They've also created, you could say, some interface between the driver and the rider to have some kind of interaction. Also get some stickiness for the driver to use the Uber application. So we put that in as well. And basically, what comes out of it is the Uber driver application

which has been used by millions of drivers every single day.

2.4 BILLION MODIFICATIONS PER MONTH Slide #8

When we ask our customers what is really important, that is map freshness. And that we can tell our customers that we are doing 2.4 billion modifications every month is absolutely helping our story towards our customers. Of course, there's a lot of other things which is important as you can see in the slide in terms of different sources which is coming in to come to our map database.

IMAGES Slide #9

And as you heard previously also from Alain, that we have all these type of partnerships, which basically means we have access to 600 million live devices which is providing us with probes every single day. And that in itself is a very unique proposition to the market and to our customers and is actually helping us a lot winning deals out there. But we didn't stop there. So we were sitting down said, 'Hey, how can we help our customers helping their customers even better than are doing today?' So basically trying to delight, you could say, through the whole channel and that's basically how we came up with what we call, and you heard before, the map editing partnership.

MAP EDITING PARTNERSHIP Slide #10

So we've basically been taking our tools, giving them to our customers, our strategic partners and letting them edit regularly into our map database. And of course, the whole idea behind it is that we can turn these edits around much faster and we can have a much fresher product. And of course, our partners are very interested in having that freshness so they can provide the best product to their consumers. And again in the market they are in.

So again, what you see here is the tools. Just an example of changing the street name which you do directly into the TomTom map database with using the TomTom tools. And again, we have trained our partners as they were exactly TomTom employees. So all the quality rules, all these other things, of course, is in place.

MARKET SEGMENT EXAMPLES Slide #11

In the beginning of the slide, you saw lot of different types of logos and again, as you heard also me talking about at the beginning like some of the segments we are active in like fleet and logistics, web and mobile and analytics. Let me run through with you a couple of examples, how our maps are being used with different types of partners.

IMAGES PTV GROUP Slide #12

So the first one I want to show is PTV, based in Karlsruhe. PTV is very strong in what we call traffic management solutions. So of course, what you see here in the picture is the traffic centre. And of course, maps, traffic is extremely important for all these types of traffic management solutions and again they are using 100% on TomTom for all these different types of implementations.

IMAGES Slide #13

Another example I want to show you is Apple. So Apple and TomTom have been having a strategic partnership for many years and for many years to come. And also if you see here, if you take Apple Maps and you open it, you click in the upper right corner of the information and you go to the next screen you see a TomTom logo. So also Apple is very proud of showing that I'm working with TomTom and showing that to all of the users of Apple Maps.

SAP STORE Slide #14

The next one is SAP. So SAP has been taking all our base map and addressing and created a global geocode, which both can be used by SAP themselves internally, but they are also exposing that global geocoding to SAP's users. And then you could basically get access to it and pay via SAP if you want to use that global geocoding.

PARTNERSHIP Slide #15

The next one is Pitney Bowes, an American company, but they are very strong as well in Europe under the brand of Mapinfo, which is being used a lot with different type of municipalities for road planning and these types of tools, but they are also very strong in the insurance space. So basically what they're doing they're taking all the map and traffic data from TomTom and they're conflating on top. Again, if you think about the layers, they're basically putting their own layers on top of different types of information. So let's take an example, in an insurance company you want to put a price to a business or real estate or your own house, then basically combining it with flooding; crime in the area; how far are you from a police station, a fire station? They conflate all that data together and bring that solution to the insurance companies.

I also have a small video there I want to play basically explaining how we're working closely together with Pitney Bowes and why that relationship is important for Pitney.

IMAGES Slide #16

The Pitney Bowes mission is to organise and manage global address data and to be able to then provide attributes and enrichment data around those addresses.

Pitney Bowes has made the decision to do business with TomTom a number of times over the last 20 years. The decision came down to very complementary business models. TomTom enables Pitney Bowes to execute our strategy because of the investment that TomTom makes in building and maintaining global Maps.

We work in a number of key verticals. Our primary one is insurance. So our insurance clients use address validation and cleaning being able manage so they have a single view of the customer. But even more importantly is our geocoding and our location data. TomTom collect really, really valuable data around addresses, around streets, around points of interest, and the fact that it is global in coverage and it has a consistent data model is really, really important to that relationship.

Pitney Bowes, one of the most exciting things as we look forward, is working together with TomTom to build out a complete and current highly accurate and precise global addressing data set. I really think the most exciting time in our relationship is ahead of us.

Go-to-Market Slide #17

Okay. So that was a little bit about our product offering in the uncompiled maps and traffic area. And then as I mentioned in the beginning, I'll go through our offering for the Maps APIs. But let's start asking the question. What is an API?

Go-to-Market Slide #18

It is the application programming interface or API. It's the engine under the hood and the behind the scenes that we take for granted. But it's what makes possible all the interactivity we've come to expect and rely upon. But exactly what is an API? It's a question everyone asks. OK, not really, but we're glad you did. The textbook definition goes something like this: In computer programming, an application programming interface, API, is a set of routines, protocols.

OK to speak plainly, an API is the messenger that takes requests and tells a system what you want to do and then returns the response back to you. To give you a familiar example, think of an API as a waiter in a restaurant. Imagine you're sitting at the table with a menu of choices to order from and the kitchen is the part of the system which will prepare your order. What's missing is the critical link to communicate your order to the kitchen and deliver your food back to your table. That's where the waiter or API comes in. The waiter is the messenger that takes your request or order and tells the system, in this case the kitchen, what to do and then delivers the response back to you. In this case, food. Now that we've whetted your appetite, let's apply this to a real API example.

Yeah, so what is a good example of real examples? So look at it like that. We are the kitchen and basically we're now taking on uncompiled maps and putting it into the kitchen. We then have hired the best chefs in the world, which of course is our engineers, and they are doing all the cooking for you. So basically, what it means for you as a developer, it means much faster time to market using the APIs versus taking and using the uncompiled maps.

Of course the unique thing for TomTom is we have both, right? So we are both offering for the market, whatever you think, whatever company you are, whatever application you want to build, a solution you want to set up. We have both offering for you.

But again, with the APIs, it's a very easy way to get to market very, very quickly. We are estimating that the overall of the total market of Maps APIs is around a billion dollars and it's growing as well. We started recently as TomTom with our Maps APIs, which basically means that our market share is tiny today, but we definitely have high expectation in the overall Maps API space.

Maps APIs Product Portfolio Slide #19

So if you look at our product portfolio on the Maps APIs: So we have search, but of course under search you have different type of functionalities like geocoding and reverse geocoding, routing different type of functionalities as well. I'll come back in a second and show an example of EV routing which we released recently. And you have map tiles. You have the traffic. And in the end you have the Maps SDK.

So let's take again the example I used for the uncompiled maps for store locator. So in this case you just hit the search API for your store. And you hit the map tiles and basically already there you have your store locator. So again, hopefully there's a good example of showing that with the Maps APIs it's very simple and very easy to use and fast go-to-market. Let's go into the routing and show you an example for the EV routing.

IMAGES Slide #20

So here we are calculating a route from our office in San Jose to Los Angeles. You're driving a BMW i3 and the blue polygon you're seeing immediately is the range you're having for your EV car. And you can see that, of course, that when you get into the range out of the range of the blue polygon, then you have to find or search for an EV station. Then we are also providing part of our EV offering so you can search for the EV stations. We will tell you if the EV station is open. We also tell you if the EV station is free so you can get there and start charging your EV vehicle. So with that of course we're helping all the EV drivers getting from A to B in a very smooth and easy way.

Maps APIs Channels Slide #21

If you look at our Maps API channels, we have high level two channels how we go to market with our Maps APIs.

IMAGES Slide #22

We have our own developer portal and then we have our enterprise unit for the more, you can say, larger strategic deals for going out to the market.

TomTom Maps APIs for Developers Slide #23

If you start with a developer portal. So you just go to developer.tomtom.com and you can access to our developer portal. Look at it a little bit like a store. We can go and browse around and figure out what you want to buy. So you can go in, sign up, test and play with all our APIs. The business model we have introduced here is what we call 'pay as you grow'. So you start free and when you start growing your business, you start paying for the API and the usage. And again, it is super simple. You can just put in your credit card. You don't have to talk with us. You can do anything on your own. If you want to talk with us, we like that as well. You can of course contact us and we can do that online and help you build your application. Again, very easy and very simple.

IMAGES Slide #24

The other area, as I mentioned, is the enterprise area and one specific contract I want to highlight is our contract with Microsoft. So we started our contract with Microsoft a while ago, but we, as TomTom, and now as we are putting our Maps APIs in Microsoft Cloud, Azure, which basically means that all the Microsoft internal developers have access to the APIs. Then we also agreed with Microsoft that they could bring it to the market under their own brand. So they bring our Maps APIs under the Azure Maps brand. Microsoft is then adding some other interesting things in the product offering themselves. We recently also announced between TomTom and Microsoft that the Bing Maps and Cortana will also move to TomTom.

So I think it's fair to say that our relationship with Microsoft is very good and very solid. And wherever Microsoft have a need for any type of location maps, traffic, they are using TomTom. But instead of I'm continuing explaining why Microsoft is doing, it is much more interesting to hear for Microsoft themselves. So I'd like to invite Chris Pendleton, head of Azure Maps, to the stage.