

- The spoken word shall prevail -

## **Speech at Deutsche Telekom's CeBIT 2015 press conference**

**Hanover, March 15, 11.00 a.m.-12.00 p.m.**

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Welcome to Deutsche Telekom's CeBIT press conference.

Our motto of this year's CeBIT is "Wirtschaftswunder 4.0." If you search the Internet for images related to "Wirtschaftswunder," the first thing you see is a lot of smoke.

- Smoking factory chimneys,
- corpulent men with especially large cigars, and above all,
- roads packed with cars from a time long before the days of catalytic converters and unleaded gasoline .

That is all gone now (and if we are honest, we don't miss a lot of it). So today, when we call for a new, a digital Wirtschaftswunder – Wirtschaftswunder 4.0 – digitization made in Germany – it is clear it must be about different things. Literally everything that Germany has done so successfully for half a century is being put to the test.

Read the media:

- Google and Apple are building self-driving cars,
- Samsung is buying the battery division of the supplier Magna Steyr,
- the former book retailer Amazon dominates global retail almost alone.

The challenge has a name: digitization.

I don't have a single customer meeting any more without precisely this topic being raised: How can we successfully digitize German and European

industry. And how do we ensure that we don't become dependent on the major, in some cases all-powerful economic regions in North America and Asia.

What our customers expect and need in this regard boils down to five main points.

The "Big Five" of digitization, if you like (and all without smoke):

1. Standards,
2. Platforms,
3. Data analysis
4. Security, and
5. Connectivity

Our customers need high-performance network access, security, platforms to exchange and use the mass data produced by digitization in real time. And more than that: Industry 4.0 needs "a language" or in other words: standards.

Today I have news in all five areas addressing customer needs:

#### Re 1) Standards.

Germany's industry must speak with one voice to promote its interests internationally and make itself heard. It is about making digitization work in an integrated way across the entire value chain (in manufacturing/in the engine room, when integrating suppliers/cross domain, when involving logistics companies – i.e., the logistics chain, through to retailers and end users) and not just within one company, but across all branches of industry.

That is why standards and pragmatic implementation are so important, we need a language that everyone understands. We need to speak with one voice as a German and European industry on the Industry 4.0 international standardization committees. In order to be heard in this arena, Deutsche Telekom and SAP are now forming a consortium for the standardization of Industry 4.0.

We are setting the example here because this is where we see the greatest need for action. We are already in talks with other industry partners.

We need and are relying on the knowledge of German mechanical and plant engineering. Hence our initiative is open to new partners from industry.

From my many meetings with customers, I have also taken that we do not need to fear standards from the United States. If we as Germany, or better still, as Europe, succeed in speaking with one voice on an issue as important as industry standards, then we will be heard.

Why?

We are the world's outfitter when it comes to automotive and mechanical engineering.

Companies like Siemens are leading in the field of plant engineering and automation technology. Germany is by far the world leader in the development of embedded systems (68% market share) which are what actually make it possible to automate machine steering and processes. So we are ideally positioned when it comes to converting old industry business models into new digital ones. We just have to exploit this position. And soon. That is exactly what SAP and Deutsche Telekom plan to do together. That is the aim of our consortium.

## 2) We are launching the Cloud of Things for Industry 4.0

Customers can't and don't want to have to battle with technical obstacles for Industry 4.0. Some have tried with their own platforms, but quickly found the cost to be too high to bear alone.

Here at the trade fair, we are therefore launching the Cloud of Things. In doing so, we are making it easy for our customers to make progress in their digitization strategies, without having to make huge investments themselves.

For corporations, we are launching a new, open, cloud-based platform: the Connected Industry Platform. To begin with, we used this exclusively to connect vehicles. Now we are using this platform to offer customers a simple way to connect all kinds of everyday objects (like bicycles or suitcases). The first pilot projects have now gone over to live operation:

Take Hamburg port, for example, where we have just signed an agreement with the port authority and our project partner SAP. Regular operation connects container terminals with trucks, which substantially increases turnover at the port thanks to improved logistics.

Another example is the connected car platform (1 million vehicles already): We entered the market with connected cars very early on (BMW, Daimler, Claas). The platform now already receives 15 million hits per day.

And it is so successful that we have been able to export it. It is this platform that forms the technical basis for our partnership with China Mobile. We will kick things off there this summer.

For medium-sized companies we are launching an "Industry 4.0 package": this is to help small and medium-sized enterprises to network machines quickly and easily and monitor their production around the world. Our package contains the hardware, the SIM card, a data rate plan, and access to the Cloud of Things platform. This records and processes the device and sensor data – all from the Telekom Cloud, highly securely from German data centers. At the trade fair, we are providing free developer packages, so that business customers can try out the scenarios before rollout. Companies that then want to take the next step will get three Industry 4.0 boxes free of charge, so they can test real integration at their company. With these platforms, we offer our customers an easy way to get on board with Industry 4.0 – making Wirtschaftswunder 4.0 – digitization made in Germany, real for everyone.

### 3) Big data: We are getting into real-time analysis of mass data.

Today, companies need to constantly create new customer experiences, otherwise they have no chance against the competition. Analyzing data in real time can help in this regard. Take, for example, public transport. Metropolitan areas are growing ever faster and more and more people commute to work. For those traveling by car, the result is often congestion. Wouldn't a real alternative be to make sure that development areas on the outskirts are well connected by bus or streetcar?

This is precisely what VAG Nuremberg is doing. It wants to improve its offering for passengers in outlying districts. And because public funds are limited, the investment in new routes also needs to reach as large a number of passengers as effectively as possible. Sounds trivial, but it isn't. And this is where big data comes into play. The important thing is that customers need to be sure that their data is in good hands. We have developed a model that meets the needs of citizens for data privacy. And

Andrea Vosshoff's Federal Data Protection Authority has also given us the green light. This makes us the first company to use big data with the approval of the Federal Data Protection Commissioner.

We only use anonymized, grouped mobile communications data, so that it is not possible to identify individual cell phone numbers. And we are not interested in the specific data of individuals. We just need the mass data – "swarm" information, if you like – so we can gain new insights. In this case, it is possible to determine, which routes are being taken by particularly large numbers of people in the greater Nuremberg area.

The transportation company compares this information with its own route network service. Thus it is possible to quickly identify districts that are under-served by public transport.

Previously, costly manual counts have provided not entirely reliable data. This new method represents a quantum leap. We are still in the trial stage. Ultimately, passengers will benefit from better connections and optimized timetables.

There will be fewer overcrowded buses and streetcars, fewer empty runs, but also less congestion from commuters on the roads. What works in Nuremberg, will of course also work in other metropolitan areas. And all this without having to look at individuals or sideline data privacy. We at Deutsche Telekom are aware of our responsibility and place great value on working fairly and transparently. At any rate, VAG in Nuremberg is delighted – and often receives visits from other transportation companies wanting to see the pilot project in action. As I mentioned, new customer experiences are in demand.

With 10 billion passengers per year using German public transport, this is a task with great reach.

We have the trust of customers and citizens – and this trust is paramount to us. There are enough sensible application scenarios for data usage and Deutsche Telekom will offer safe methods.

#### 4) Security: free basic provision for all

Digitization does not work without security. That is why it came as no surprise to me that in the latest risk barometer of the German insurance company Allianz, the issue

of security made the greatest leap forward. And although awareness for this issue is increasing, many small companies in particular continue to be somewhat reckless in this regard. Of course, the old workshop used to be locked. By contrast, the doors to modern IT systems are often left wide open.

Do you know if your antivirus program is up-to-date? Do you use encrypted connections or data storage? If you know this and do this, you are one of a fortunate minority. Because it remains the case that the biggest security gaps today are the unsecured devices of consumers and small companies. The reason is easy to identify: Previous solutions have all been too complicated and confusing. We want to make it much easier for consumers and small companies. In the second quarter, we will be offering a website with a cockpit through which anyone can easily download a protection package to their PC via the Telekom Cloud. The updates then run automatically in the background. It is convenient, easy to use – and offers a free, basic service for all.

For this purpose, we have entered into a new partnership with four security providers. They are:

Avira – antivirus software

Steganos – encrypted VPN connection

Strato – secure data back-up in German data centers

Secomba – encrypted data storage on any storage media

(2014: Secomba won the "Deutsche Gründerpreis," a German award for start-ups)

With these four providers of security solutions, we have put together the new, free, cloud-based protection package for consumers and for small and medium-sized enterprises. All four partners come from Germany – this strengthens the German security industry. We will expand the offering step by step to include more partners and products. In the next step, we want to include all mobile devices and in the future, offer a much greater scope of functions in a premium version. Always with the proviso that security must not be allowed to fail out of complexity – we as Deutsche Telekom will make sure of that.

## 5) Connectivity: Always in the best network.

Getting started easily with digitization ultimately also means access must be as simple as possible. Overall, we have put together five digitization packages for medium-sized companies:

one for IP,

one Office package,

Hotspot Plug'n' Play,

and – as already mentioned – one for Industry 4.0.

I'm not going to go into all packages in detail - let's just take a look at Hotspot

Plug'n'Play.

Without network, business customers cannot offer their customers an experience.

These days, shopping is more than just the purchase of a product: An ever more available network is now part of everyday life. Customers expect to have it in the bookstore and when buying shoes.

While I enthusiastically inspect new technology in store, my wife prefers to chat with our children. Or I surf online while she tries on clothes. There are already lots of hotspots in Germany – almost all of them, by the way, provided by Deutsche Telekom.

But on vacation, it occurred to me that compared to other countries, we have remarkably few free WLANs, especially in city centers. This is due, not least, to legal liability regulations. The federal government now wants to change this, as it announced shortly before CeBIT. We already have a simple solution - free of liability risk – the Hotspot Plug'n'Play package in collaboration with Cisco: Restaurants, bookstores, medical offices can offer their customers free WLAN, allowing them to get straight online at a click, without having to log-in. It's simple and secure via the Telekom Cloud. So in this age of online shopping, stores can offer more to their customers than just selling them goods or serving them culinary delights. The owners share their own Internet connection, without needing technicians and troublesome configuration. A private area is created for the company itself, and a public area for guests. As a result, a trip downtown becomes more attractive. In the future, experience shopping will only be conceivable with online access.

Last but by no means least, there is also an integrated solution for medium-sized companies: MagentaEINS Business.

At the IFA, we already launched MagentaEINS for German consumers. Now we are also offering German business customers combined fixed-network and mobile offerings – comprising an IP and a mobile line, as well as a cloud component.

### **Summary:**

Deutsche Telekom is well positioned for digitization. We have been in the cloud business for ten years and are a pioneer in this field.

From talking to customers over the last few years, five drivers have crystallized for me, the Big Five of digitization:

1. Industry standards: Germany, better still Europe, must speak with one voice in this regard. And the consortium of SAP and Deutsche Telekom is a rallying cry to the entire industry.
2. We are not just talking about platforms, we are also launching two now:  
the Connected Industry Platform for corporations, and  
the Cloud of Things for medium-sized companies.
3. We are starting with mass data analyses in real time: as the first company in the German market to get the green light from the Federal Data Protection Authority.
4. In terms of security, we are offering easy, free basic provision for all.
5. We stand for connectivity, always bringing customers to the best network.

And to finish, we have a surprise for you: We have prepared little cardboard glasses – people with Android cell phones can stick their smartphones in there.

Once you have downloaded the "Wunder to go" app, you can also see a guide to the stand, completely virtual, but available at any time. Augmented reality: it's worth it.

Thank you for listening.