



CLOUD WEBINAR

13.04.2016

Anette Bronder | Director Digital Division

Frank Strecker | SVP Cloud Partner Products & Ecosystems & Big Data



LIFE IS FOR SHARING.

DISCLAIMER

This presentation contains forward-looking statements that reflect the current views of Deutsche Telekom management with respect to future events. These forward-looking statements include statements with regard to the expected development of revenue, earnings, profits from operations, depreciation and amortization, cash flows and personnel-related measures. You should consider them with caution. Such statements are subject to risks and uncertainties, most of which are difficult to predict and are generally beyond Deutsche Telekom's control. Among the factors that might influence our ability to achieve our objectives are the progress of our workforce reduction initiative and other cost-saving measures, and the impact of other significant strategic, labor or business initiatives, including acquisitions, dispositions and business combinations, and our network upgrade and expansion initiatives. In addition, stronger than expected competition, technological change, legal proceedings and regulatory developments, among other factors, may have a material adverse effect on our costs and revenue development. Further, the economic downturn in our markets, and changes in interest and currency exchange rates, may also have an impact on our business development and the availability of financing on favorable conditions. Changes to our expectations concerning future cash flows may lead to impairment write downs of assets carried at historical cost, which may materially affect our results at the group and operating segment levels. If these or other risks and uncertainties materialize, or if the assumptions underlying any of these statements prove incorrect, our actual performance may materially differ from the performance expressed or implied by forward-looking statements. We can offer no assurance that our estimates or expectations will be achieved. Without prejudice to existing obligations under capital market law, we do not assume any obligation to update forward-looking statements to take new information or future events into account or otherwise.

In addition to figures prepared in accordance with IFRS, Deutsche Telekom also presents non-GAAP financial performance measures, including, among others, EBITDA, EBITDA margin, adjusted EBITDA, adjusted EBITDA margin, adjusted EBIT, adjusted net income, free cash flow, gross debt and net debt. These non-GAAP measures should be considered in addition to, but not as a substitute for, the information prepared in accordance with IFRS. Non-GAAP financial performance measures are not subject to IFRS or any other generally accepted accounting principles. Other companies may define these terms in different ways.



AGENDA

1

INTRO & DEFINITION

2

CLOUD MARKET OVERVIEW

3

MAJOR CLOUD MARKET TRENDS

4

DEUTSCHE TELEKOM CLOUD PORTFOLIO

5

USE CASES

6

CLOUD BUSINESS WRAP-UP





**EVERYTHING THAT
CAN BE DIGITIZED,
WILL BE DIGITIZED ...**

NICHOLAS NEGROPONTE,
PROFESSOR AT MIT



MARKET POTENTIAL

- Cloud industry digitization
>40 bn € market potential in 2018
- **50 bn** connected devices by 2020
- **250 mio** connected cars in 2020
- Cloud as enabler of digitization



**... AND EVERYTHING THAT CAN BE CONNECTED,
WILL BE CONNECTED!**



TIMOTHEUS HÖTTGES,
CEO DEUTSCHE TELEKOM



CLOUD SERVICE MODELS

CLOUD DEFINITION

SOFTWARE AS A SERVICE

Provisioning of applications and service packages

Customers: Business departments, Lines of Business

PLATFORM AS A SERVICE

Provisioning of operating system and application frameworks

Customers: IT departments & IT developers

INFRASTRUCTURE AS A SERVICE

Simple provisioning of virtualized hardware resources

Customers: IT departments

CLOUD MANAGEMENT & INTEGRATION

Cloud Service Orchestration

Customers: IT departments

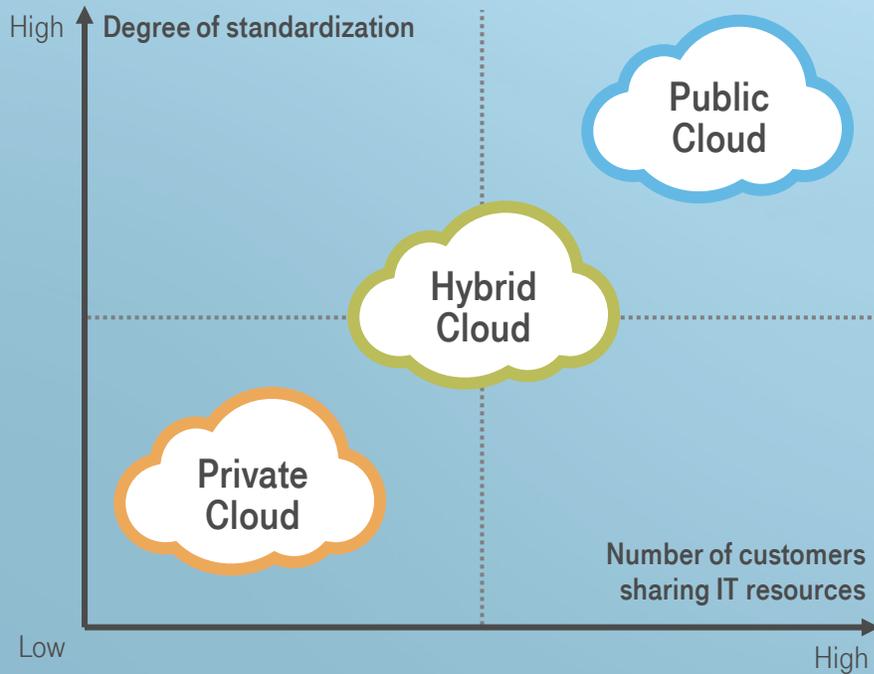
* National Institute of Standards and Technology (NIST), U.S. Department of Commerce



CLOUD DEPLOYMENT MODELS

CLOUD DEFINITION

CLOUD PROVISIONING – RESOURCE SHARING ON DIFFERENT LEVELS



PUBLIC CLOUD

- Internet-based delivery
- Multi-tenant
- Highly standardized
- e.g. Open Telekom Cloud

HYBRID CLOUD

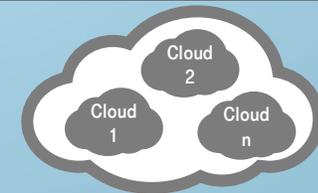
- Combination of public and private Cloud
- e.g. Open Telekom Cloud + DSI

PRIVATE CLOUD

- Connected to private network
- Single tenant
- Capacity pricing
- e.g. Dynamic Services for SAP

MULTI-CLOUD

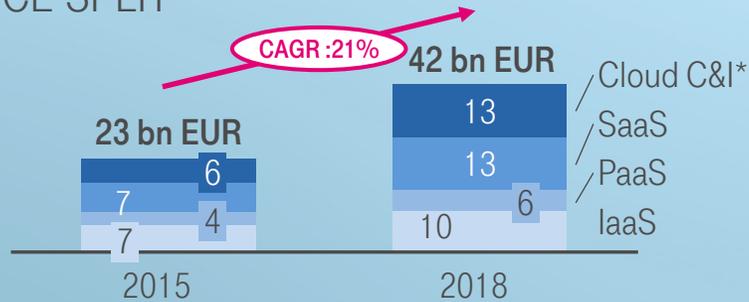
Combination of several Clouds
(same or different provisioning type)



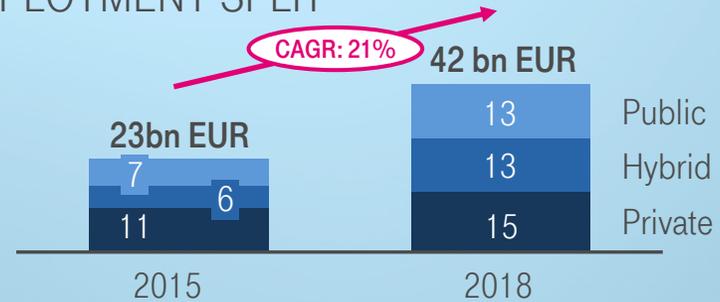
CLOUD MARKET OVERVIEW: EUROPEAN CLOUD MARKET IS GROWING MASSIVELY

EUROPEAN CLOUD MARKET

SERVICE SPLIT

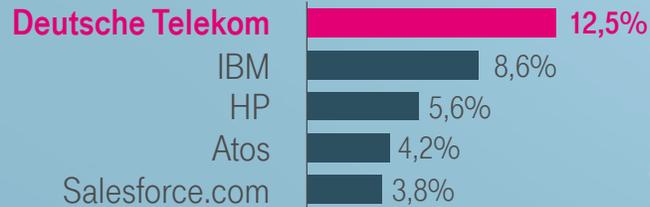


DEPLOYMENT SPLIT



Source: DTAG Cloud Market Model 2015, Addressable Market: focus B2B

GERMAN CLOUD MARKET SHARES 2014



Source: PAC Ranking 2015; Market: German B2B

- Telekom is the market leader in Germany
- In selected European Markets we already have a strong footprint
- Our aim is to become leading Cloud Provider in Europe

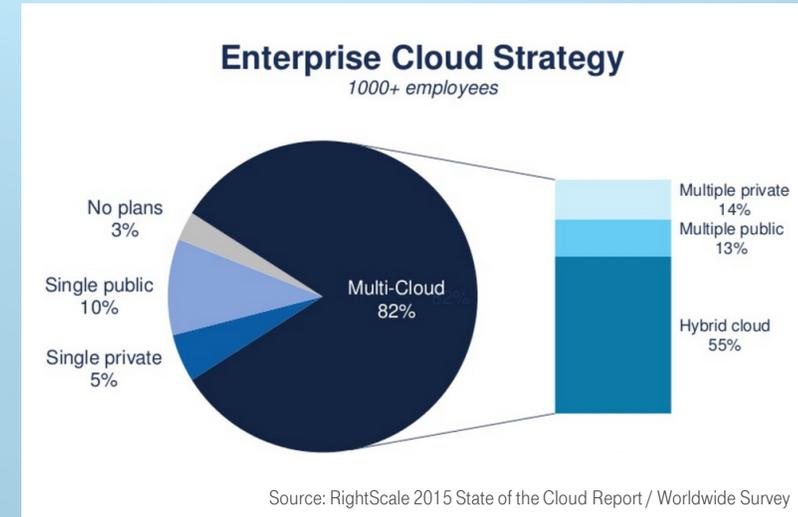
MAJOR CLOUD MARKET TRENDS

INCREASING DEMAND FOR MULTI-CLOUD SERVICES

MARKET TRENDS

- For digitization Multi Cloud models are key: New digital business models require **Hybrid & Multi Cloud** solutions
- Strong Partner **Ecosystems** will become a key success factor in Cloud & Big Data market
- **Multi-cloud ecosystems** support the **digitization** of customers' **businesses** by providing adequate solutions for each demand

CUSTOMER DEMAND MULTI-CLOUD



82 % OF ENTERPRISES WANT MULTI-CLOUD



MULTI-CLOUD IS KEY TREND IN IT INDUSTRY



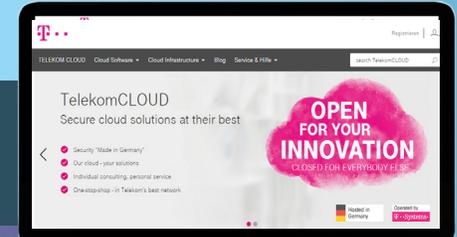
CLOUD AS CORNERSTONE OF DT GROUP STRATEGY

DEUTSCHE TELEKOM STRATEGY – FOCUS CLOUD

LEADING EUROPEAN TELCO & CLOUD PROVIDER



DEUTSCHE TELEKOM OFFERS FULL-RANGE CLOUD PORTFOLIO TO MEET CUSTOMERS' MULTI-CLOUD NEEDS



**DEUTSCHE TELEKOM
CLOUD OFFERING**

VIA

**OMNI-CHANNEL
SALES APPROACH**

CLOUD MANAGEMENT & SYSTEM INTEGRATION

**CLASSIC IT
OFFERING**



**PRIVATE CLOUD
SOLUTIONS**
based on
Dynamic Cloud Platform

**PUBLIC CLOUD
PRODUCTS**
based on
Cloud Partner Ecosystem



IP NETWORK & CLOUD CONNECTIVITY

THE COEXISTENCE OF THESE DEPLOYMENT MODELS ARE REALITY

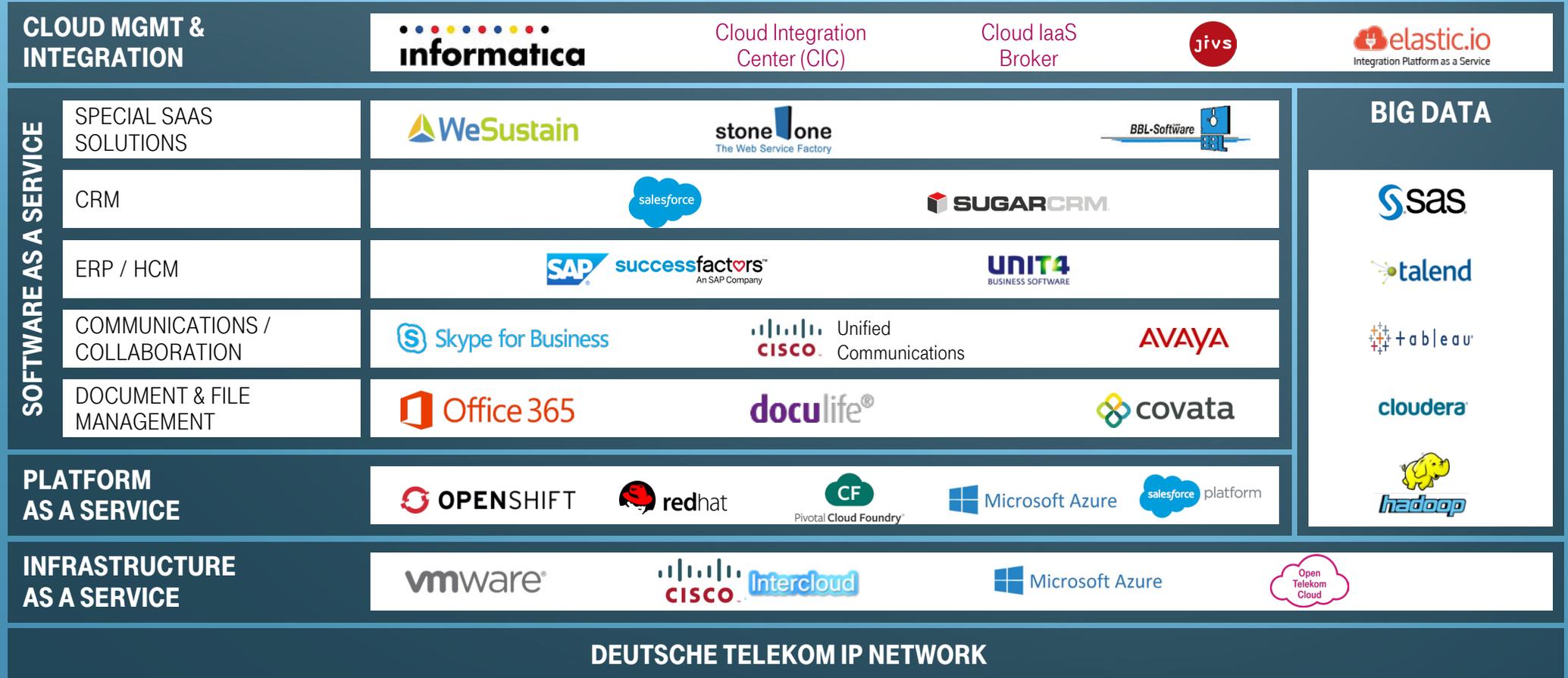


MULTI-CLOUD



LIFE IS FOR SHARING.

NEW DT PUBLIC CLOUD PORTFOLIO IS BASED ON STRONG PARTNER ECOSYSTEM



BIG DATA







IAAS USE CASE: OPEN TELEKOM CLOUD

SIMPLE, SECURE AND AFFORDABLE CLOUD INFRASTRUCTURE



THE CUSTOMER

CERN is a research organization of 21 member states, operating the largest particle physics laboratory in the world. The laboratory had > 2,500 staff members in 2015 and hosted > 12,000 fellows and visiting scientists and engineers.



THE CHALLENGE

- 1,000 virtual machines and storage cluster with more than 500 TB
- User-friendly interface and OpenStack APIs for maximum customization
- Test run for future cloud services in accordance with European privacy and data processing requirements

THE SOLUTION

- Open-Stack based IaaS-solution
- Servers and data-storage on demand/push of a button
- Certified, highly secure Data Center, 99.95 % availability

CUSTOMER BENEFIT

- Hosted on German territory – Protection against patriot act
- Rapid availability through intuitive self-service with full cost transparency

	IaaS	PaaS	SaaS
Public			
Hybrid			
Private			

PAAS USE CASE: DYNAMIC SERVICES FOR SAP

FLEXIBLE IT ON DEMAND - VIRTUALIZED SERVER LANDSCAPE

THE CUSTOMER



With 57,557 employees, 115 breweries and distributors in more than 65 countries Heineken counts as one of the global leaders in brewing business (No. 4). In 2007 the total sales summed up to 119.8 hectolitres of beer.

THE CHALLENGE

- Supplying and operating of centralized SAP-Systems for 10,000 to 18.000 users
- 7/24-Service, system-availability of more than 99,7 %
- Contract with Bonus/Malus

THE SOLUTION

- Embracing global service, usage-dependent billing
- Systems run on innovative and certified dynamic SAP-platforms in Frankfurt am Main, Service-Delivery-Sites in the Netherlands, Germany and Hungary

CUSTOMER BENEFIT

- Flexible, scalable infrastructure and SAP- resources, hardware dimensions don't need to be able to handle peak loads
- Acknowledged competence and high service-quality
- Variable, transparent costs and substantial savings of 30%



	IaaS	PaaS	SaaS
Public			
Hybrid			
Private			

SAAS USE CASE: SALESFORCE

DIGITIZATION OF CAMPAIGN MANAGEMENT



THE CUSTOMER

A German multinational car manufacturer.



THE CHALLENGE

- Better campaign-management for the sales campaign of an automobile manufacturer
- Unclear classification of sales bonus
- High manual effort

THE SOLUTION

- Campaign monitoring with an App based on Salesforce
- Contemporary and automatic sales data recording
- Comparison to campaign investments
- Data delivery to existing systems (e.g. wage accounting)

CUSTOMER BENEFIT

- Real time transparency
- Quick reactions and steering of campaigns
- Measurement of campaign ROI
- Save costs by optimizing the process
- Accurate bonus payouts

GENERAL CUSTOMER BENEFITS: DT CLOUD SOLUTIONS HELP CUSTOMERS TO OVERCOME THEIR PAIN POINTS IN IT



SECURITY

- Maximum security and ensuring German data protection regulations
- Customer's own security policy



RELIABILITY

- Highest service levels
- 365/24/7 availability
- IT&TC Services E2E access



FLEXIBILITY

“Best of breed” through strong Cloud Partner Ecosystem

LINES OF BUSINESS

Agility & Speed, Business processes, new Business models, “Make Money”



IT DEPARTMENT

Cost reduction, support business, “Keep the Engine Running”



COST SAVINGS

Enterprises of any size can reduce their IT cost by sourcing via the cloud



SPEED / AGILITY

Legacy applications slow down rapid innovation and hinder flexible solutions



TRANSFORMATION

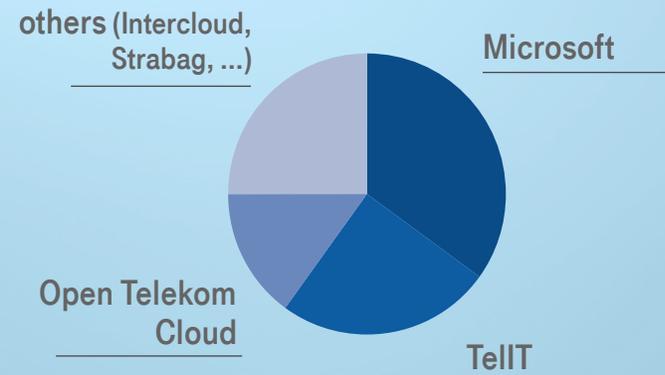
Worldwide consolidation of IT & processes towards Cloud / Digital Business

CLOUD SECURITY AS MAJOR USP OF DEUTSCHE TELEKOM CLOUD SERVICES

BIERE – HIGH-TECH FORT-KNOX

- Largest data center in Germany
- Space for max. 170,000 servers
- 30 percent reduction of energy consumption
- Highest energy efficiency of 1.3 PUE* guaranteed while ensuring Tier3 (full redundancy of climate and power supply)
- Highest security standards for data protection
- Twin core: data is mirrored in Biere and Magdeburg for security reasons

EXPECTED UTILIZATION BIERE IN 2017*



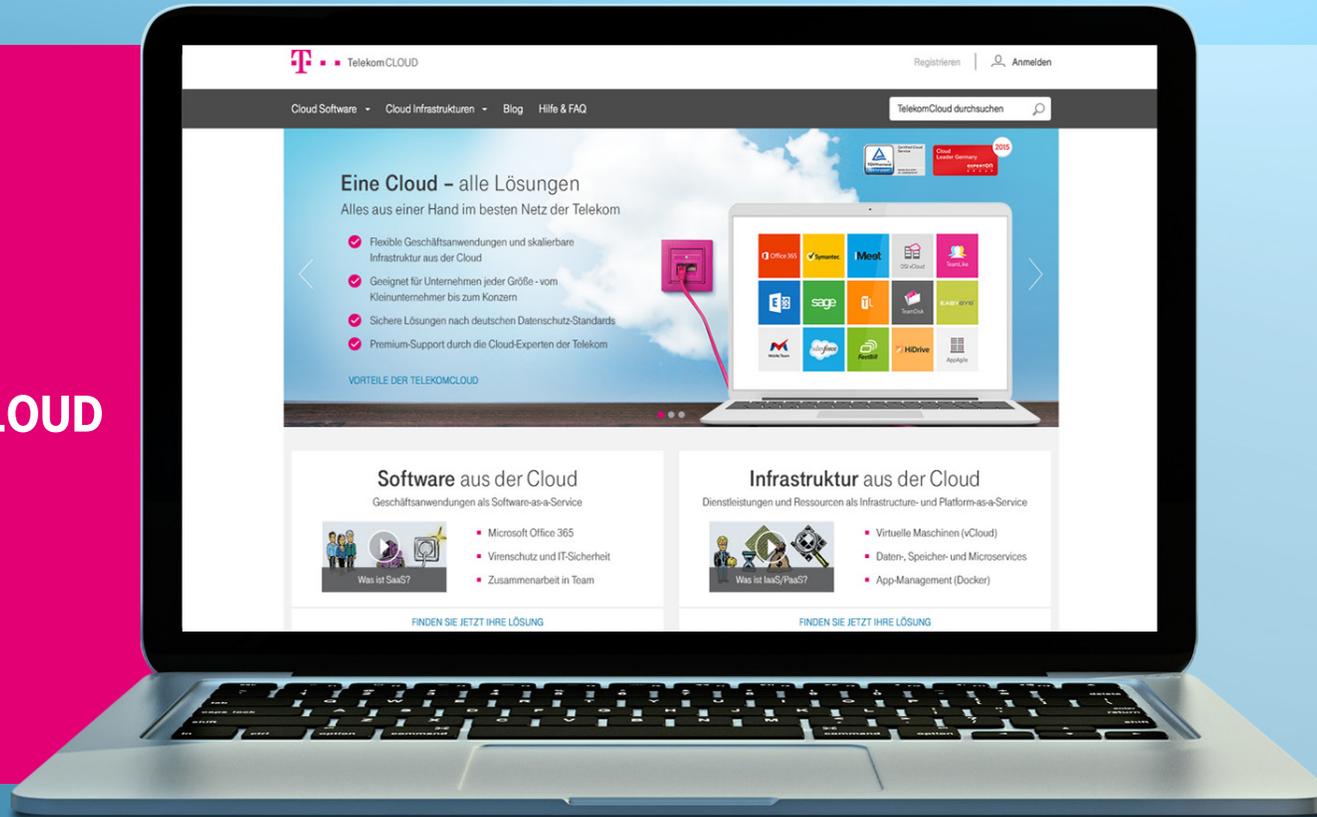
* by floor space



*Power Usage Effectiveness

TELEKOM CLOUD PORTAL AS PART OF CUSTOMER JOURNEY

TelekomCLOUD

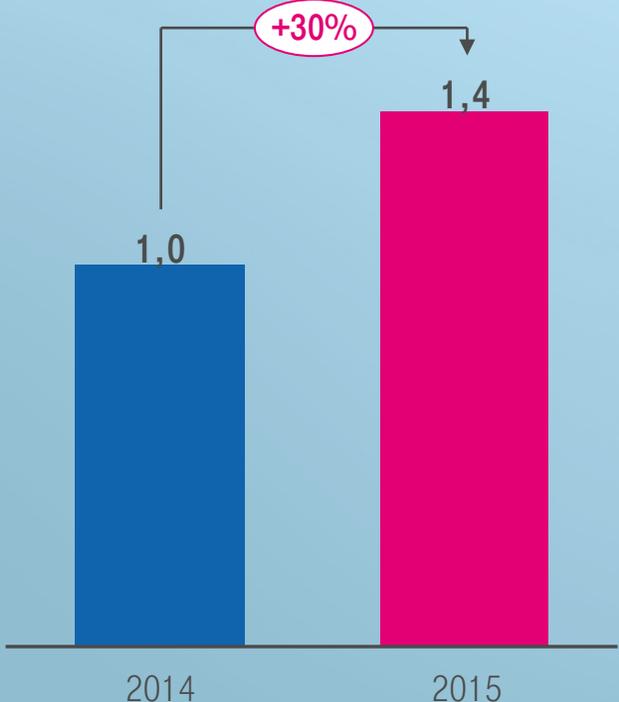


- End-to-End Journey including Web frontend, Customer Interaction Center and Direct Sales/Field Force
- Customer Onboarding within minutes (e.g. 4 minutes for Open Telekom Cloud)
- Customer Billing within 10 seconds (e.g. Open Telekom Cloud)

CLOUD BUSINESS WRAP-UP: OUR EFFORTS LED TO A SUCCESSFUL YEAR 2015

REVENUE GROWTH CLOUD COMPUTING

(in € bn)



Numbers rounded, rounding effects



Connection of Appagile & DCS backbone
connect development environment to the customer's network



Dynamic SAP ERP, Cloud Hosting Platform SAP
Decision criteria: quality and flexibility



vCloud and other
Migration of database, application and middleware



Date Center Outsourcing
infrastructure transformation in vCloud



Application operations for SAP
SAP Hana, platform Munich (Sharepoint)



WeSustain
Software for efficient sustainability management



Full Outsourcing, End-to-End Service
Decision criteria: cost-benefit ratio

~ 3,500 CLOUD WINS TOTAL IN 2015



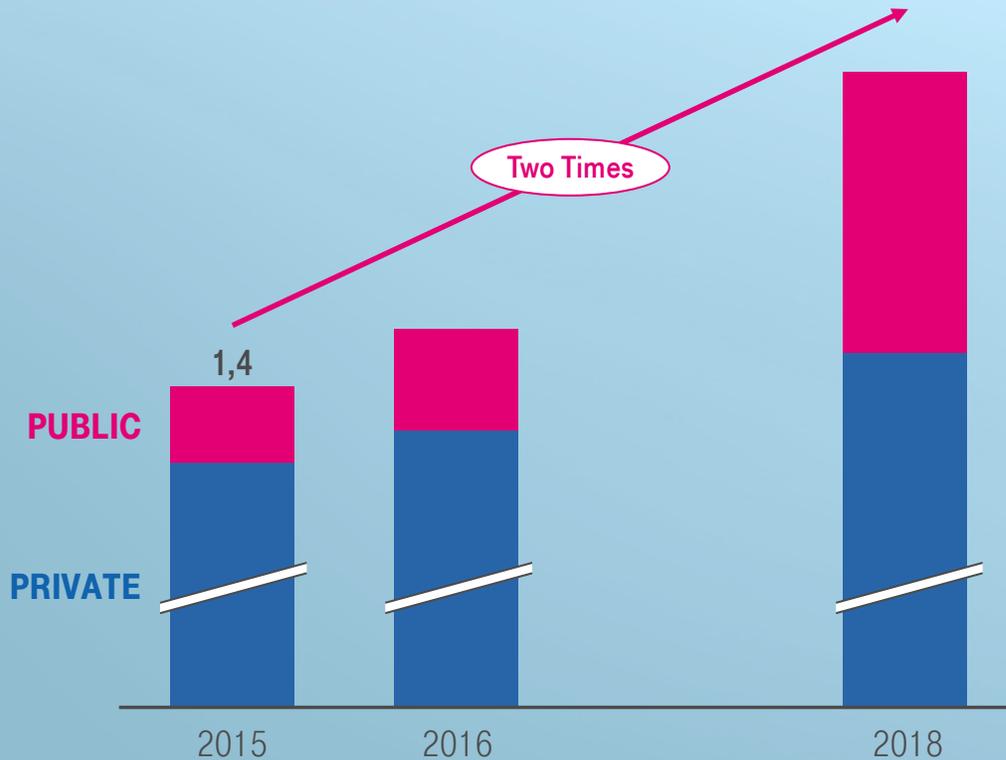
LIFE IS FOR SHARING.

DEUTSCHE TELEKOM CLOUD REVENUE AMBITIONS

DOUBLE CLOUD REVENUE WITHIN THE NEXT THREE YEARS

REVENUE

(in € bn)



MAJOR DRIVERS

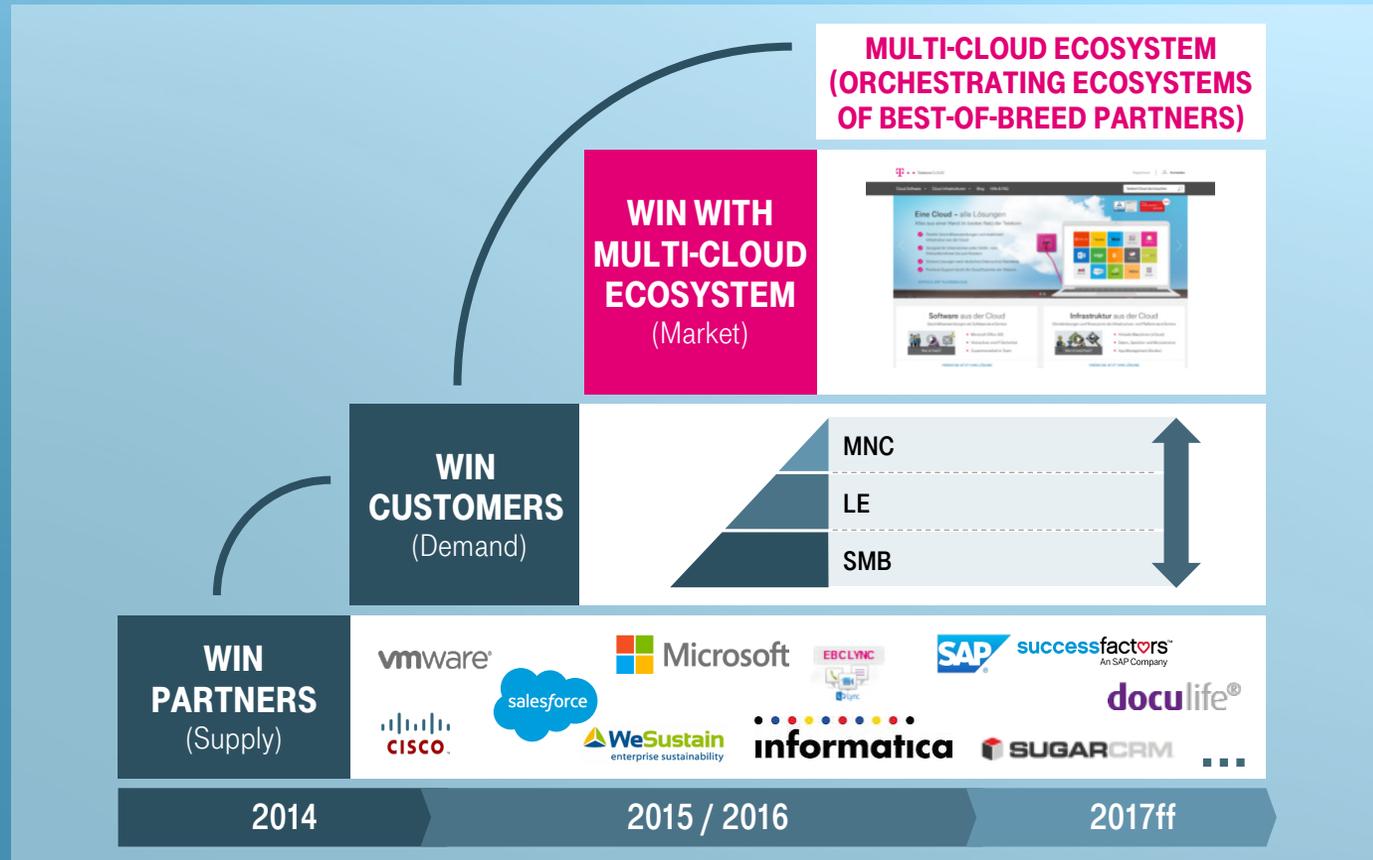
- Open Telekom Cloud (Huawei)
- Microsoft
- Other T-Systems Digital Division offerings, e.g. Salesforce, Cisco Intercloud
- Dynamic Services for Unified Communication
- Dynamic Services for SAP
- Dynamic Workplace
- Dynamic Services for Collaboration (DSC)

Numbers rounded, rounding effects



LIFE IS FOR SHARING.

OUR FUTURE DEVELOPMENT: BECOME LEADING EUROPEAN CLOUD PROVIDER WITH MULTI CLOUD ECOSYSTEM STRATEGY



DOUBLE CLOUD REVENUE WITHIN THE NEXT THREE YEARS

OUR TARGET:

BE THE LEADING EUROPEAN CLOUD PROVIDER

#1



LIFE IS FOR SHARING.

Q&A SESSION

PLEASE ASK YOUR QUESTION VIA

- PHONE
- WEBCAST
- EMAIL: INVESTOR.RELATIONS@TELEKOM.DE
- TWITTER: INCLUDE @DT_IR TAG IN YOUR TWEET



FURTHER QUESTIONS

PLEASE CONTACT THE IR DEPARTMENT

Investor Relations Contact details

Phone +49 228 181-8 88 80
+1 212 301-6114

E-Mail investor.relations@telekom.de

Contact details for all
IR representatives:
www.telekom.com/ircontacts



IR webpage

www.telekom.com/investors

IR twitter account

www.twitter.com/DT_IR

IR youtube playlist

www.youtube.com/deutschetelekom



THANK YOU!