Open Data How Companies and Society may benefit

November 20th 2014 RDA DE "The Stone Age did not end because humans ran out of stones.

It ended because it was time for a re-think about how we live."

William McDonough - Architect



Digitalization: Driver for Economic Growth

- mega-trend of the 21st century (Schmidt/Cohen 2013)
- Germany 2012, ICT-sector: 850.000 employees, revenue≈150 billion € (ВІТКОМ)
- average annual growth of German internet economy is approx. 8 % → approx. 4% of GDP in 2016 (BCG)
- by 2015: data is expected to create 4.4 million IT jobs globally (SIIA)



"I can't think of any industry sector or company which is immune from digital transformation ... and the pace of change will only increase."

> Andy McAfee Principal Research Scientist am MIT

→ reaction

action \rightarrow

"I want us to ask ourselves every day, how are we using technology to make a real difference in people's lives."

Barack Obama

source: http://bit.ly/1nVRocA



Big Code - Lines of Code

Average iPhone app **Hubble Space Telescope** Windows 3.1 (1992) Control software for US military drone Windows NT 3.1 (1993) **HD DVD Player Xbox** World of Warcraft Server Google Chrome Windows NT 4 (1996) MySQL Boing 787 Flight Software F35 Fighter jet Microsoft Office 2013 Large Hadron Collider Facebook US Army Future Combat System MacOS X 4.1 Tiger Average high-end car 1.3+ million iPhone apps,

= 50.000 lines = 2 million lines = 2.5 million lines = 3.5 million lines = 4.5 million lines = 4.5 million lines = 5.5 million lines = 6.5 million lines = 11 million lines = 12 million lines = 14 million lines = 23 million lines = 44 million lines = 50 million lines = 61 million lines = 63 million lines = 85 million lines = 100 million lines

1.3+ million Android apps = 170billion lines source: http://www.informationisbeautiful.net/visualizations/million-lines-of-code/

Data Driven Innovation

"A method to innovate, iterate and/or improve using sustainable & continuous ways using data based decision process, where data is sourced to help learn about people, process and technology critical to your organization".

source: http://bit.ly/1nnprH5
by Vishal Kumar



"Data is the new gold"

"Imagine we had a resource available that could stimulate new innovations, a market worth tens of billions of euros, and increase the transparency and governance of public life. We do – it's the data held by Europe's public institutions."

Neelie Kroes, 2011



"Information wants to be free."
Information also wants to be expensive.
...That tension will not go away."

Stewart Brand, 1987



Use and value creation of Open Data for Berlin

- Report by Technologiestiftung Berlin (link: http://bit.ly/OdmGf0)
- Different multipliers for estimating the added value (based on Pollock):

benefit =
$$F \lambda_1 \lambda_2 \lambda_3 \varepsilon$$

F costs

 λ_1 cost multiplier

 λ_2 benefit multiplier

 λ_3 indirect benefit multiplier

ε demand elasticity

Quantitative estimate of Open Data for Berlin:

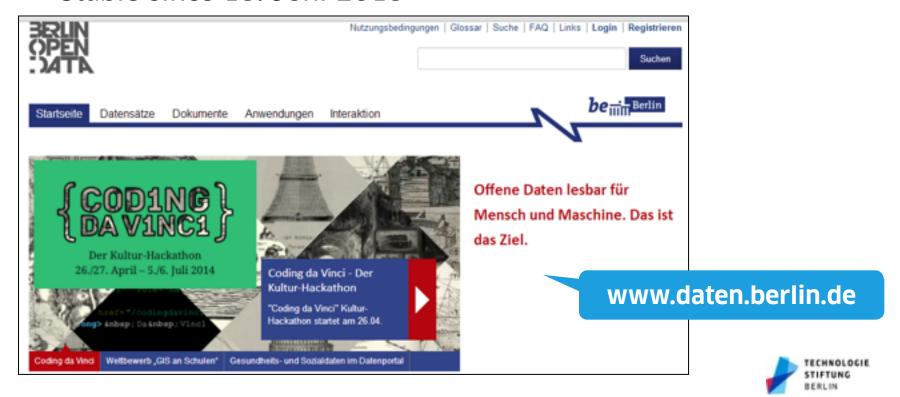
32 million € per year

 Berlin is ramping up at the moment, period of implementation approx. 2-6 years



Berlin's data portal

- First data portal of a German city
- In cooperation with Fraunhofer FOKUS and Berlin Online
 Stadtportal GmbH
- Stable since 13. Juni 2013



Berlin Big Data Center (BBDC)

- Funded by the Federal Ministry of Education and Research (BMBF)
- under the management of Technical University Berlin
- Scheduled start: 10/2014
- Members: Zuse-Institute Berlin (ZIB), Fritz-Haber-Institute of MP-Society, Beuth Hochschule für Technik Berlin, German Research Center for Artificial Intelligence (DFKI)
- Aim: develop high-innovative technologies which can organise and integrate a huge amount of Data to extract knowledge, visual analysis, economic and social value



Code for Germany - OK Lab Berlin

- Programme of the Open Knowledge Foundation Germany together with Code for America
- Aim: support developments in Open Data and Civic Tech
- since february 2014: Start of the Open Knowledge Labs



Show me the money!



Open Data: Opportunity for Berlin's Companies?



Thank you for your attention!

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