

# Big Data und HR Analytics for a future oriented HR

HR Trends 2019

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# Which similarities do these two means of transportation have?



... up to 100 electronic control units (ECUs)\*

\* Excluding "In-flight Entertainment Systems"

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Steffen Brinkmann, © Continental AG



# Modern Cars of the premium class incorporate disproportionately more rows of code than airplanes

**100 Mio.**

**1,7 Mio.**



F-22 Raptor  
(2002)

**6 Mio.**



F-35 Joint Strike Fighter  
(2011)

**8 Mio.**



Boeing 787 Dreamliner  
(2009)



Premium car  
(today)

Quelle: Images courtesy Wikipedia, Boeing (2016)

# Software Skills are a core factor for our Company and our HR Work<sup>1</sup>

**60%** Tesla

**Software and IT Specialists**

7.800 Employees<sup>2</sup>

**8%** Continental

**Software and IT Specialists**

16.300 Employees

**Average 2%** OEMs

**Software and IT Specialists<sup>2</sup>**



**61%** of **Decisions-makers** in the automotive industry

say, that their Company does NOT employ enough Software and IT Specialists<sup>1</sup>

The Half-Life of the relevance of Software Skills decreased significantly

**4 Years**

— vs —

**1,5 to 2** Years



<sup>1</sup> Connected Car Studie 2016 Kienbaum; <sup>2</sup> McKinsey Report: Automotive revolution, Tesla Motors positioned for a disruptive tech-driven future

# Industrialize “Best Fit”

Our critical path consists of four Management Areas





Create room for **Experiments:**

**Big Data** for „**Best Fit**“

– a **valuable** Approach? –

# Opportunities for Big Data Analyses in the world of Human Relations



## Scenariomodelling for Analysis

Creation of alternative Business-scenarios to derive measures for HR (e.g. recruiting activities, development strategies)



## Strategic Skillmanagement,

to identify new skills as early as possible, create transparency on the distribution throughout the company and qualify accordingly



## Fluctuation-driver-analysis,

to explore reasons for Attrition and develop measures to effectively reduce fluctuation rates

# Strategic Skillmanagement to identify global skill distributions and future relevance

**Over 30%**  
of Software & IT  
Employees covered

**Over 100.000**  
identified Skills  
overall

**Over 1500**  
different Skills



**Dummy Data for  
illustration purposes**



# Accessibility in Focus Areas and Development needs become transparent

Location	Skill-relevance (% of all analysed employees)		
	Decreasing	Stable	Increasing
Location 1	3.0%	47.5%	49.5%
Location 2	4.0%	55.5%	34.5%
Location 3	1.5%	54.0%	45.0%
Location 4	1.0%	55.0%	43.0%
Location 5	2.5%	62.0%	37.5%
Location 6	2.5%	66.5%	28.0%
Location 7	3.0%	64.5%	30.5%
Location 8	6.5%	60.0%	34.0%
<b>TOTAL</b>	<b>3.5%</b>	<b>58.5%</b>	<b>38.0%</b>

Experience

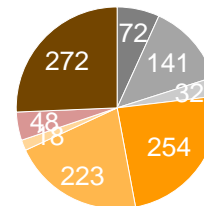


1 : 0.8

0-5 Years vs. > 5 Years of int. Experience

Focus Skills

- 1 ■ 2
- 3 ■ 4
- 5 ■ 6
- 7 ■ 8



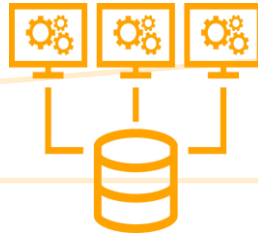
Dummy Data for illustration purposes

# Outlook: Tailor-made Assessment to ensure future oriented “Best Fit”

Skill-profiles of Employees



AI based matching with Learning offers, open positions and strategic development needs



Diagnostic Tests to ensure realisability of Matches



Employee starts long term qualification for future orientation

Employee starts qualification for new job

Employee starts qualification for current job in a changing environment

Employee finds new Job for current Qualification

**Questions?**  
Highly welcome!