



International Actuarial Association  
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**21<sup>st</sup> Global  
Conference  
of Actuaries**

17<sup>th</sup> - 19<sup>th</sup> February 2020 | Mumbai, India

# Behavioural Data Analytics for Predicting Insurance Outcomes

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AXA - BS Public

# Our digital foot print

*... is not just ubiquitous, but also exploding like never before*

More data has been created in the past  
2 years than in previous human history

**By 2025 our accumulated digital footprint will  
be 175 zettabytes, or 175 trillion gigabytes**

**By 2025, there will be over 75 bn  
connected devices, up from  
current ~30 bn**

**~5,000 digital interactions per person per day  
by 2025, up from ~700 that people average  
today**

**~30% of the data generated will be consumed in  
real-time by 2025**

**At the moment less than 0.5% of all data is ever analyzed and used**

# Shift in expectations

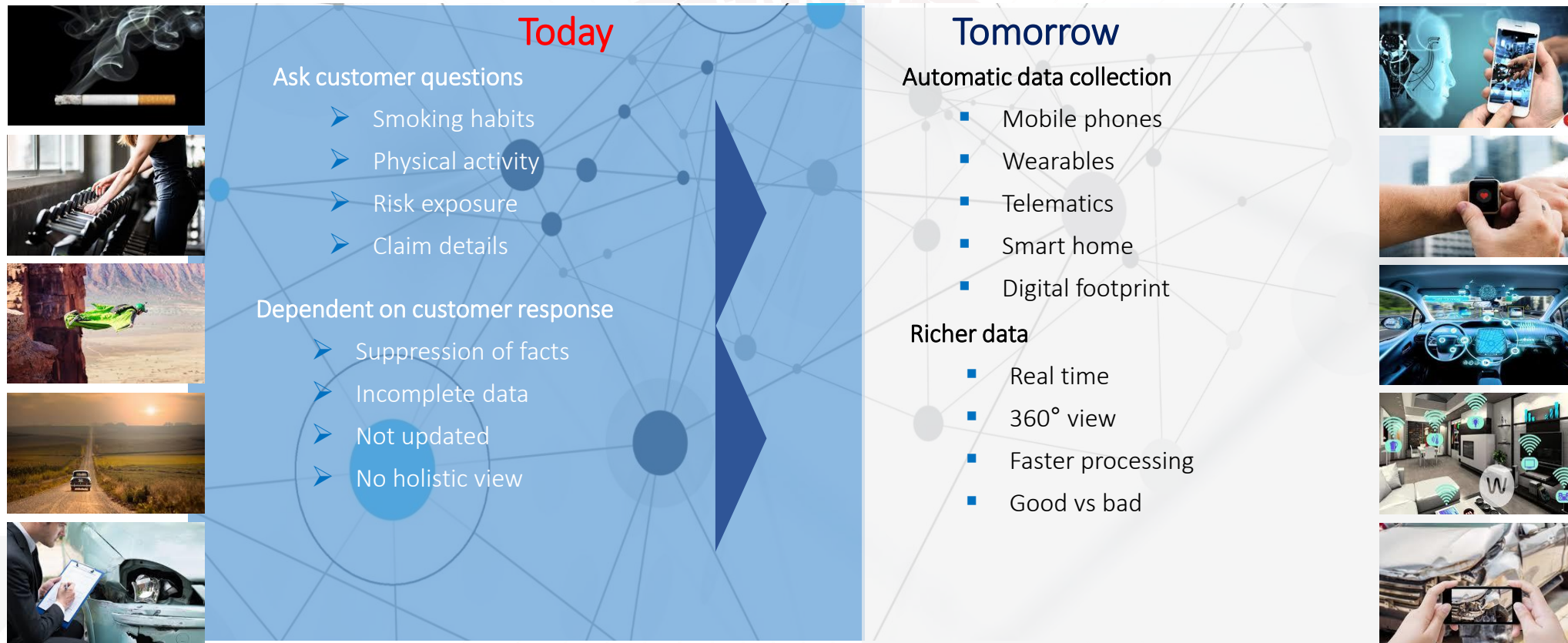
## *... The role of “Why” and “How”*

- Unique attention... Hence the need for personalized products, advertising and marketing strategies
- “Catch Me If You Can”... use not only structured data, but also unstructured and what I leave as footprint
- I need it now!!!! Are you ready with real time information?
- What about my experience? .. Customer experience becoming more important than price and product

Shift from “Who, What, Where and When” to “Why” and How”

# Going beyond traditional analytics

... It is time to change, let's analyze behaviours



EST. 1944

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# Behavioral analytics in Insurance

... we can not afford to wait



## Internet of things

- Connected cars
- Smart health



## Fraud detection

- Fraudulent behaviours
- Outlier identification or trends analysis
- Image based fraud detection



## Risk scoring

- Good and bad behaviours



## Customer analytics

- Improve customer acquisition
- Understand levers of retention/ cancel
- Understand digital journey



## Cybersecurity

- Detect suspicious network, device or user behavior
- Block organization breach attempts

# Behavioral analytics at AXA

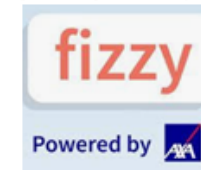
... and a lot more to do



1ère Assurance connectée YouDrive

sherlock

AXA Sherlock – Claims Analytics Suite



**Smart insurance. Automatic compensation.**  
Blockchain based parametric insurance product that covers against flight delay (2h+ delay) for any cause and indemnifies eligible passengers automatically.

Cross-sell / Up-sell

based on behaviours

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# Challenges

...many to overcome

Data privacy and security



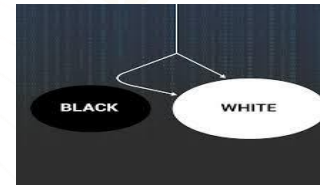
Data volume, availability, integration and accuracy



Financial viability



Algorithmic bias





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# Thank You

