



# sentiance

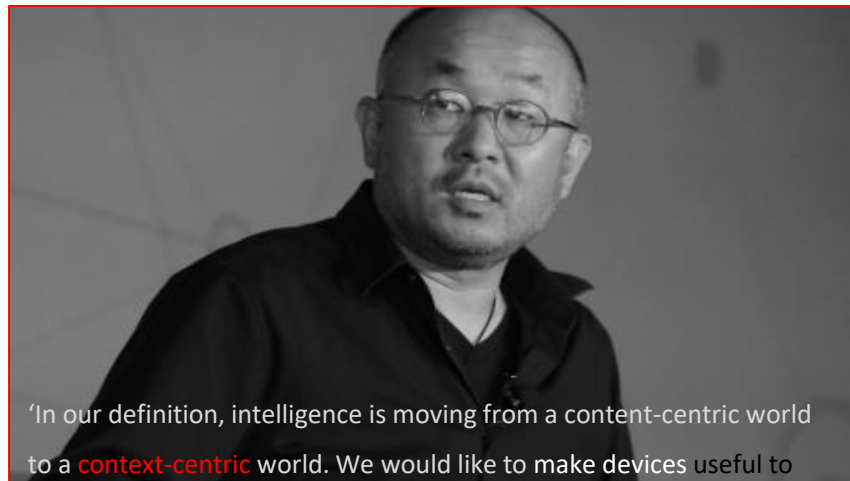
motion moments magic

# AI for contextual and motion intelligence



"AI will **personalize** everything, from education to care"

COO IBM Research Sophie Vandeboeck



"In our definition, intelligence is moving from a content-centric world to a **context-centric** world. We would like to make devices useful to you by making them contextual."

Yoon Lee - Samsung

Problem scope:

- 1) individual health behavior plays a crucial role in prevalence and exacerbations of chronic diseases
- 2) More & more room for innovative solutions in complex health issues

50% of patients  
discontinue **medication**  
prematurely

40% of **diabetes** patients  
have >3 co-morbidities  
75% have hypertension

Healthy lifestyle **MS** patients  
50% less chance of  
depression

Smoking accounts for 80%  
of **COPD**-related deaths

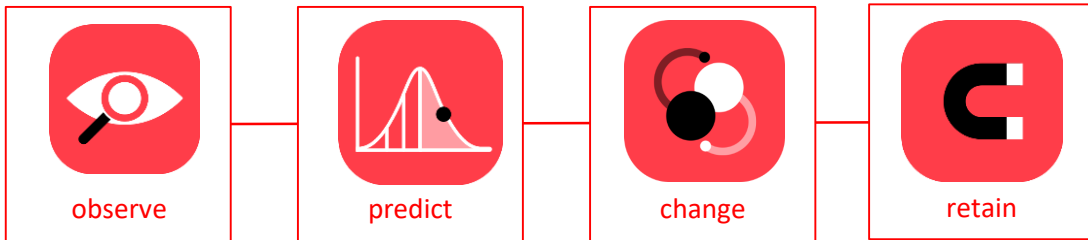
Tests using **RWE** have  
41% in achieving national  
market authorization

50% drop-out of **cardiac**  
rehab due to lack of  
motivation

Up to 29% opioid misuse in  
**chronic pain** patients

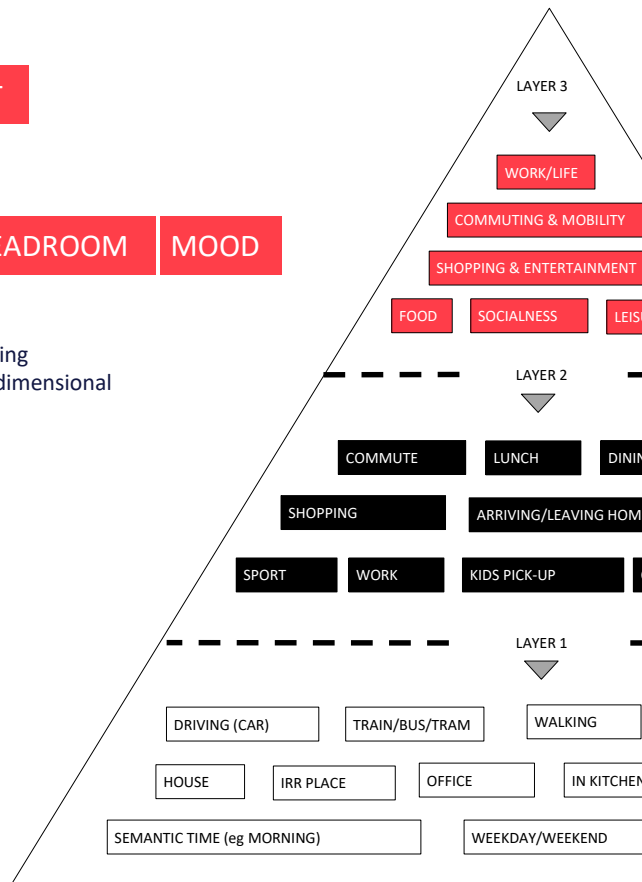
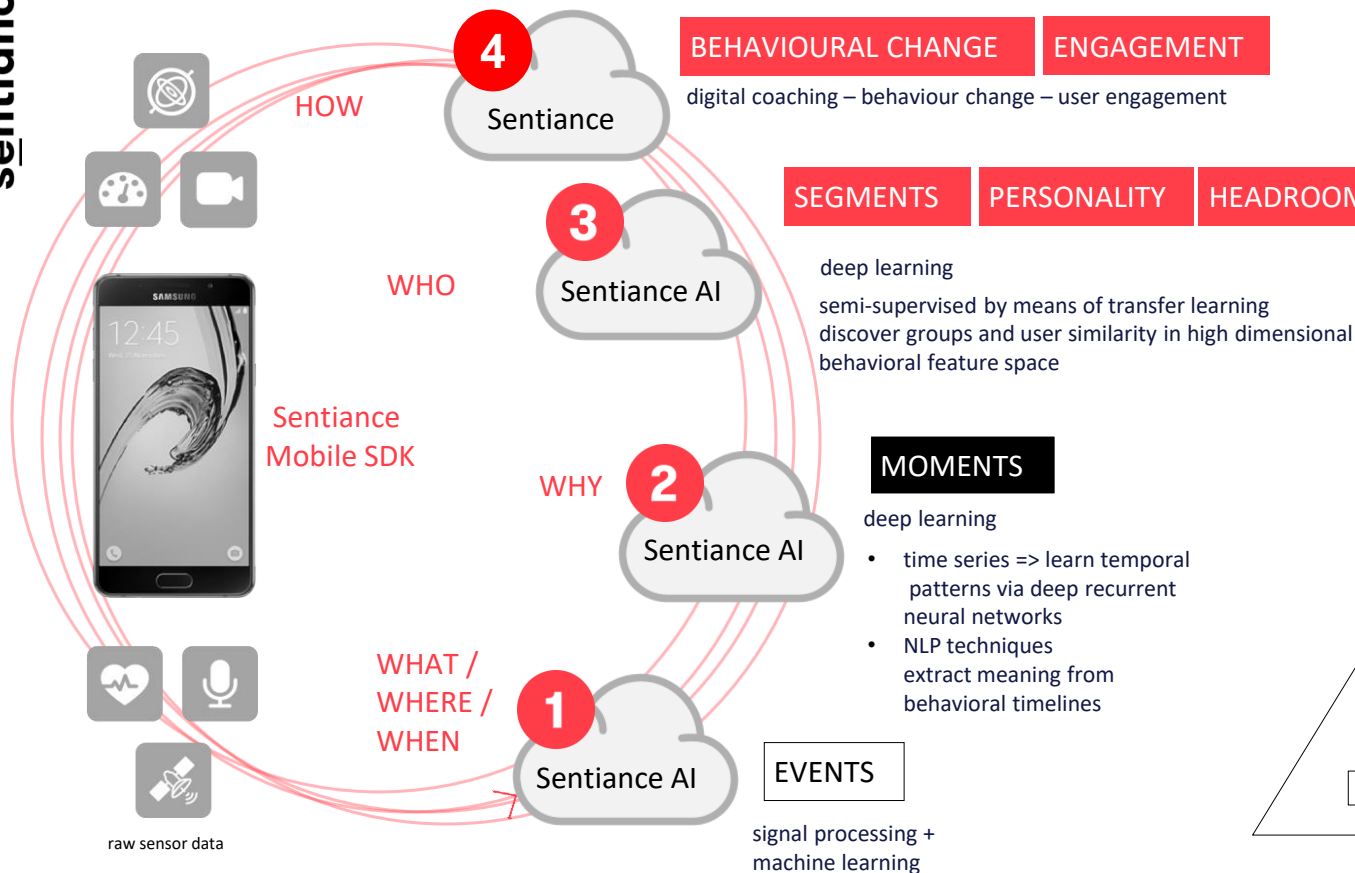
solving client problems

## motion intelligence



our proprietary **motion** intelligence and behavioral **change** platform uses motion sensor data to **learn** and **predict** real-world behavior, enabling companies to **personalize** and contextualize customer engagement and drive behavioral **change**.

# AI to improve people's life



# Personalisation through coaching

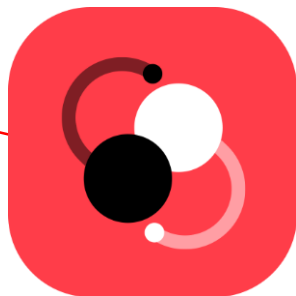
93 **validated**  
behavioural change **techniques\***

association – antecedents –  
natural/scheduled consequences –  
repetition – substitution – goals & planning  
– feedback & monitoring ...

\*BCT Taxonomy, Abraham & Michie

tailored to **psychological** factors

motivation, attitude, status, beliefs,  
preferences, pt journey, previous  
experiences ...



tailored to **individual events,**  
**moments & segments**



Dog walker Workaholic Restless sleeper Sporty



observe

city home, green commuter

commute to work

biking, regular route

predict

city bike, work

JOURNEYS  
change

JOURNEYS now  
good afternoon, don't forget to pick up  
some healthy breakfast ingredients for  
tomorrow morning

JOURNEYS  
retain

JOURNEYS now  
hi Tom, you're really a healthy lifestyle  
star. we would like to name you our  
ambassador. ok with that ?

# medication adherence



# MedApp

## About

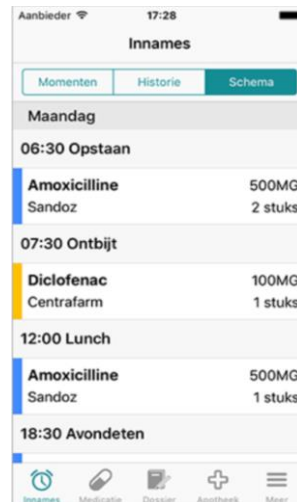
Medapp is a Dutch medication adherence app used by **80,000** customers and tested by Quintiles in collaboration with Radboud University in the Netherlands.

## Featuring

- contextual detections of adherence reminders
- smart alarms based on user context

## Results

- **75%** of patients declared the additional smart alarm reminders helped them on one or multiple occasions remember to take their medication.
- **39%** increase in medication intake with smart alarm vs control group



iOS | Android



# ethical AI is a key differentiator ahead of the pack and aligned with consumer demands



## **Fairness**

We actively work on detecting and mitigating potential algorithmic bias to avoid inequality



## **Privacy**

Combining edge-computing and back-end processing to protect privacy beyond GDPR requirements



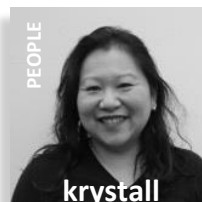
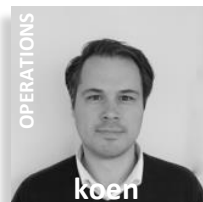
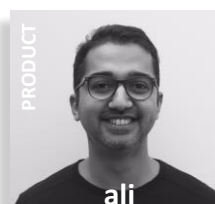
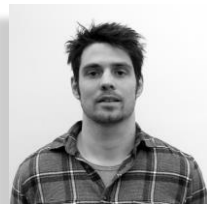
## **Explainable**

We focus on the ability to interpret AI decisions, avoiding black-box solutions



## **Robustness**

Fall-back and human-in-the-loop mechanisms are put in place to deal with unforeseen situations



**Antwerp HQ**

**Shanghai, London, NewYork**

**Vilnius (R&D – Data Science)**

**Toronto (R&D – AI computing)**

**70 employees**

**24 nationalities**

**>50 engineers**

**80% highly skilled**

**20+ postdoc/PhD**

**20+ master**

**Gartner**

**Cool  
Vendor  
2018**

**sentiance**





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