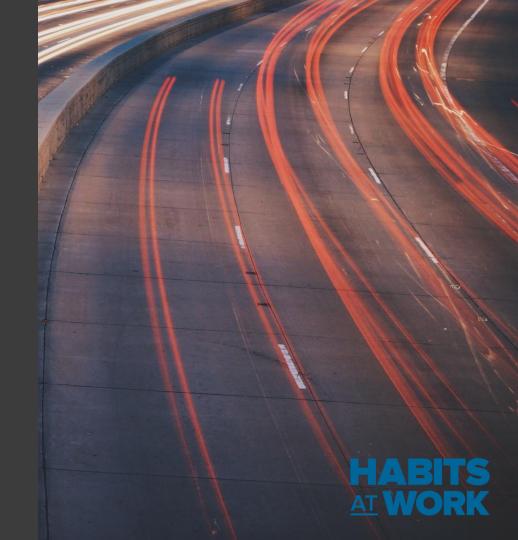
Are We Ready For Behaviour Linked Insurance?

#### Colin Bullen



"In the arms race between doctors and germs, doctors run faster" "Sugar is now a greater threat to mortality than gunpowder"

Yuval Noah Harari Homo Deus (2016)

#### What is a BLIP?

- Behaviour Linked Insurance Product
- Premium <u>or</u> benefit adjusted according to the behaviour that insured practices
- Behaviour can be many things, but will typically be activity related, at least initially
- <u>Annual review</u> of behaviour with corresponding adjustment of premium, or benefits
- Supported by <u>objective measurement</u> of the contracted behaviour

What do we need to be ready?

✓ The impact of behaviour on claims

✓ The impact of changing behaviour on claims

✓ The recipe for behaviour change

✓ Robust measurements of behaviour

✓ Market readiness



#### Questions we'll address today

✓ Does behaviour affect risk?

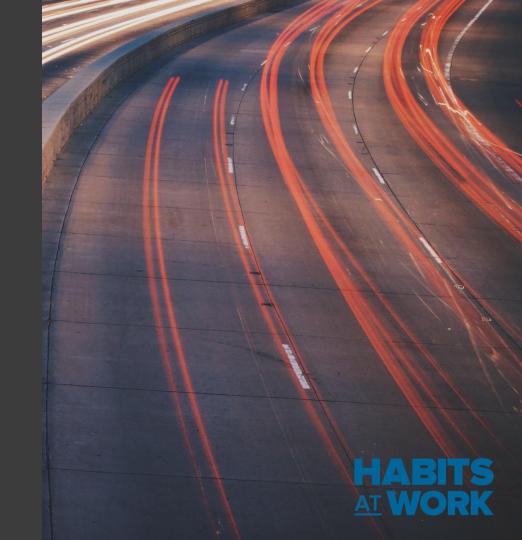
✓ What are the outcomes from changing behaviour?

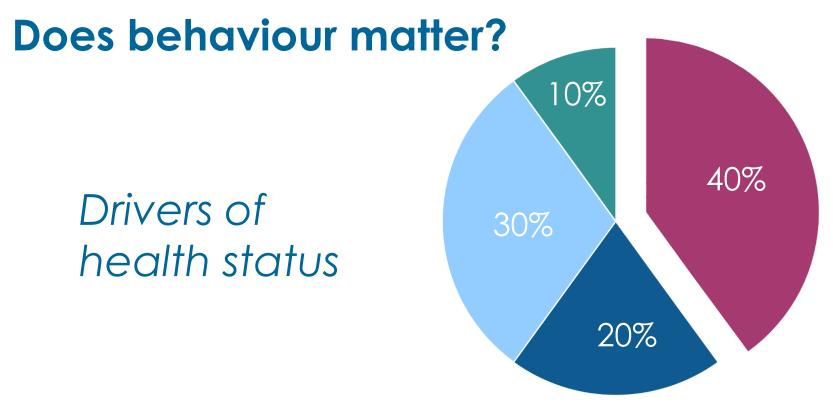
✓ How do we get people to change behaviour?

✓ How do we reliably measure behaviour?

✓ Is the market ready?

### Does behaviour affect risk?

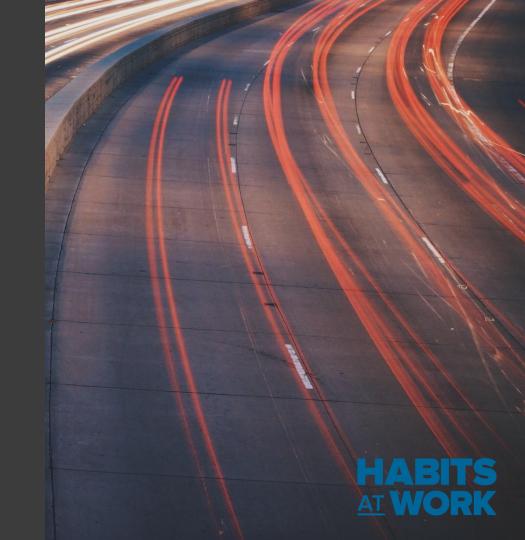




#### Habits Social & Environment Genetics Sick Care

Source: Steven A. Schroeder, We Can Do Better — Improving the Health of the American People N Engl J Med 2007;357:1221-8.

What are the outcomes from changing behaviour?



# BRATLAB

#### The research division of Habits at Work



#### **BRATLAB's Foundational Models**

### DOSE ALUE

Measures which habits bring the most value to people + companies

### FOURPOWERS

Supports the reliable creation of positive habits over time



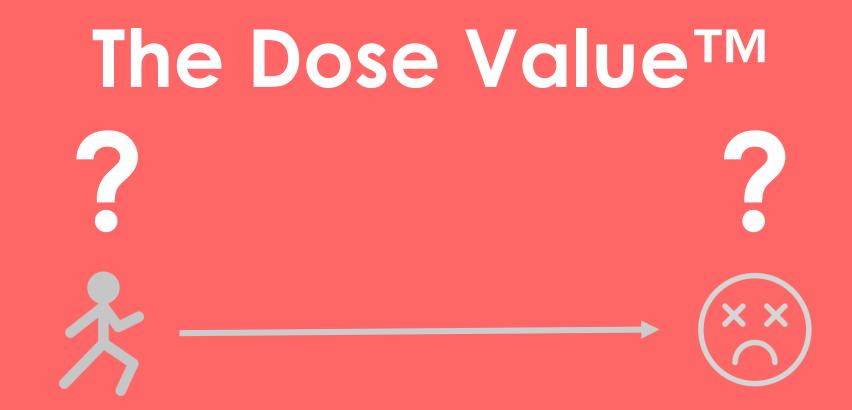
### **'PIVOTAL' HABITS** Which are worth doing, and to what degree?

## DOSE ALUE

#### Pivotal Habit (Input) DOSE: Exercise



#### Outcome VALUE: Sick care costs

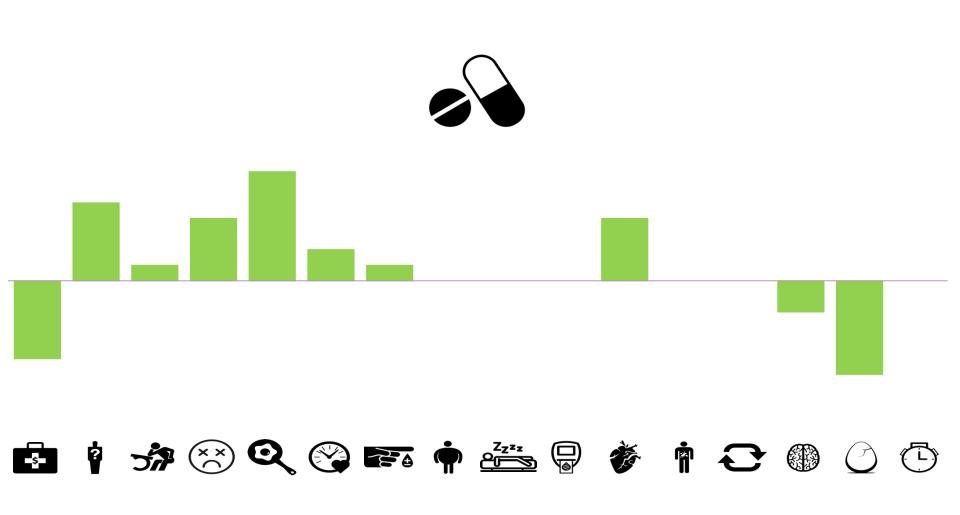


- 1. How big is the impact / value derived from the ideal dose?
- 2. How long does the value last after the dose (of the habit) stops?
- 3. In what form does the value emerge?
  - Lower financial costs
  - Fewer cases [lower incidence]
  - Lower severity or duration
  - Greater financial outcomes
  - More positive outcomes

Value ?



#### Value Costs **Dose** (Inputs) ? ×х \_\$\_ Exercise Sick Care **Absenteeism** Presenteeism Mortality Costs Healthy Eating Productivity 12 Sleep Zzz 12 12 Units per **Error Rates** Stamina **Cognitive Function** Man Hour Quitting **Smoking** Zzzz Life Quality |×| 20 **Stress** Management **Hypertension** Obesity Cancer Fatigue Drug Therapy Cholesterol **Blood Sugar Heart Disease Diabetes** © Habits at Work



© Habits at Work



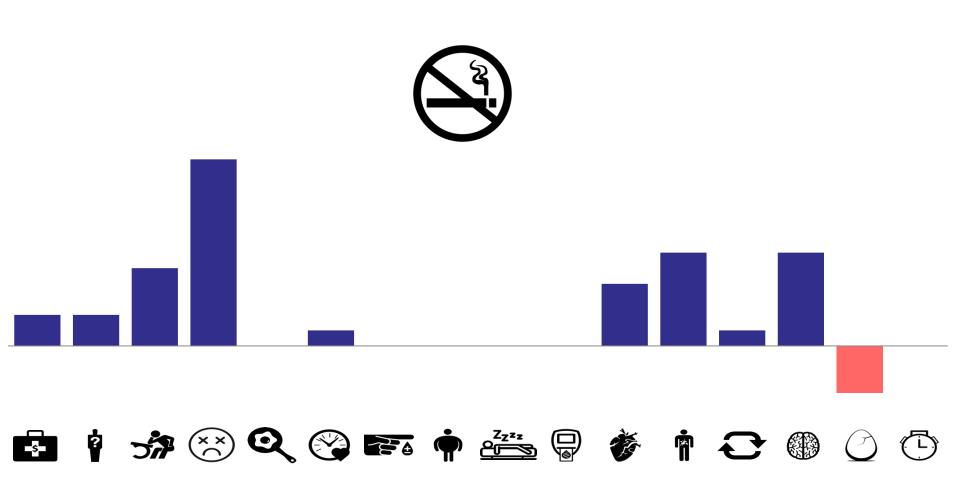
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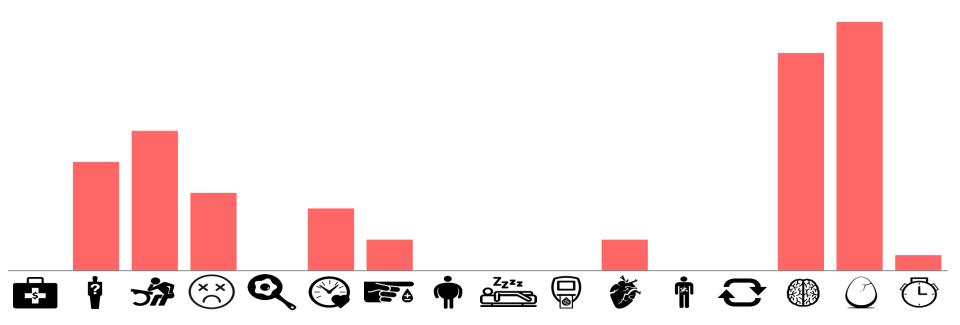
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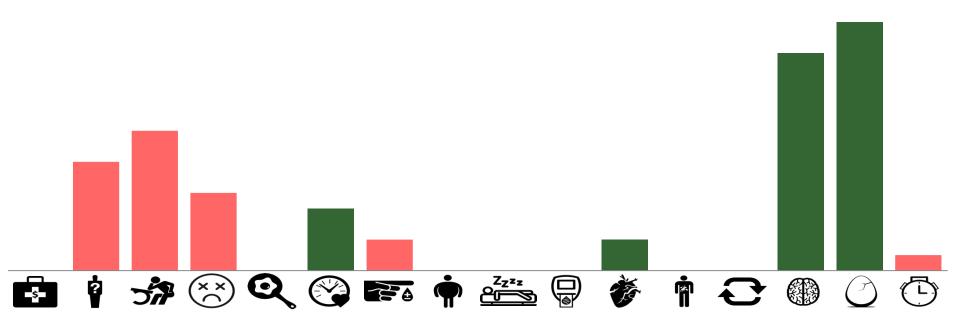


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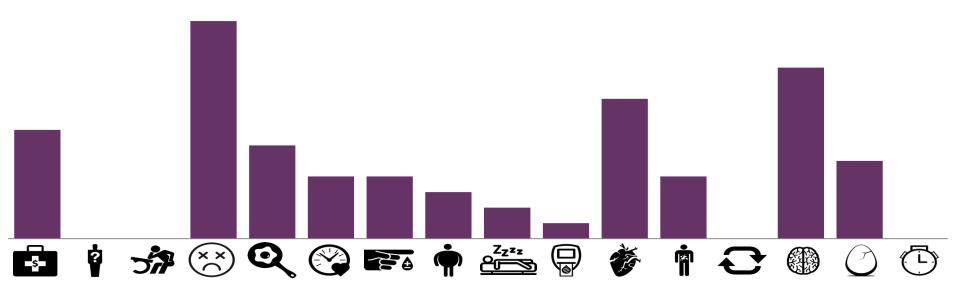




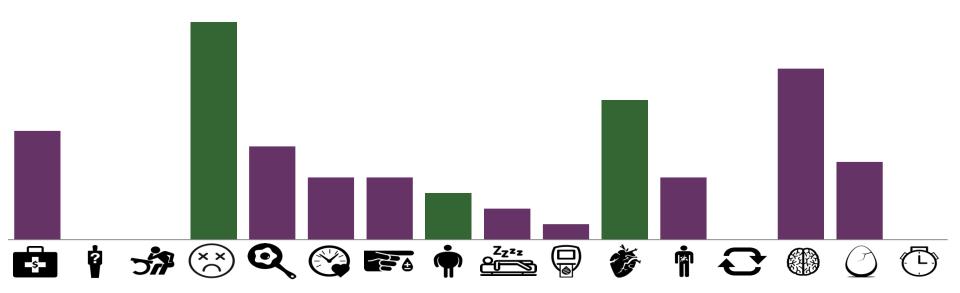


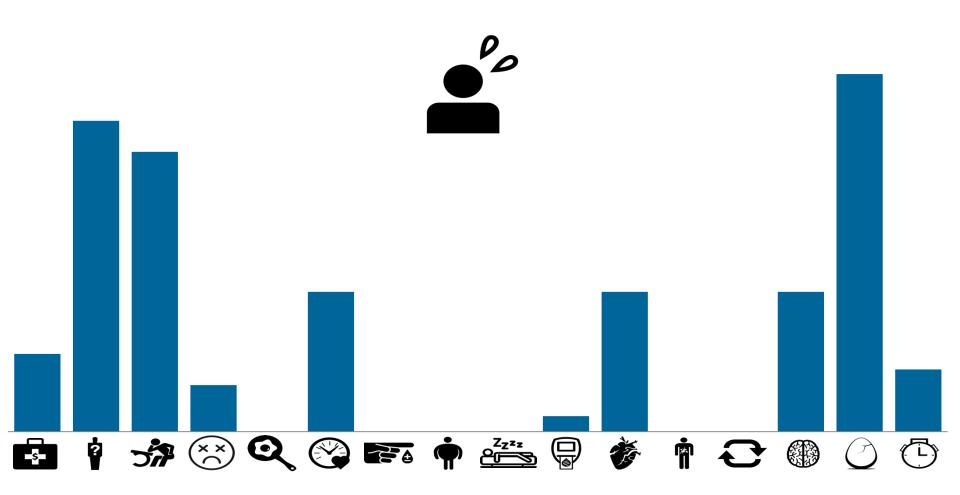


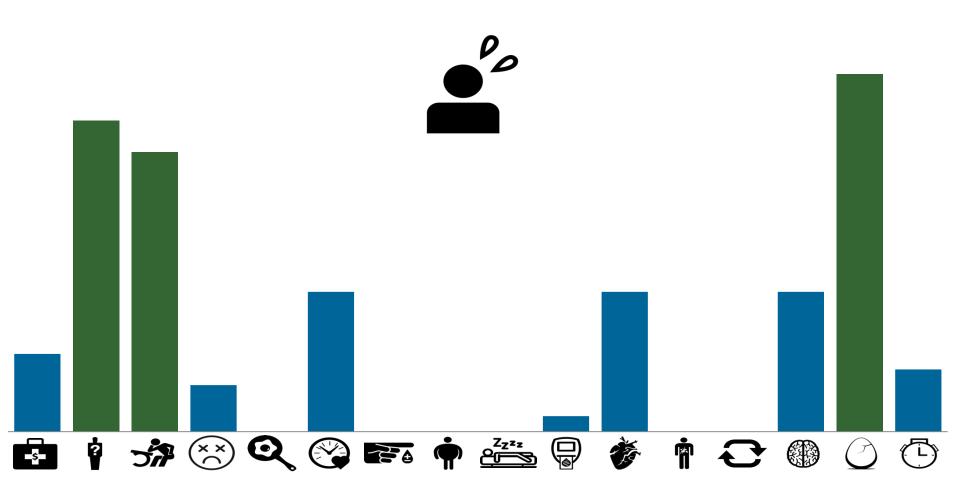






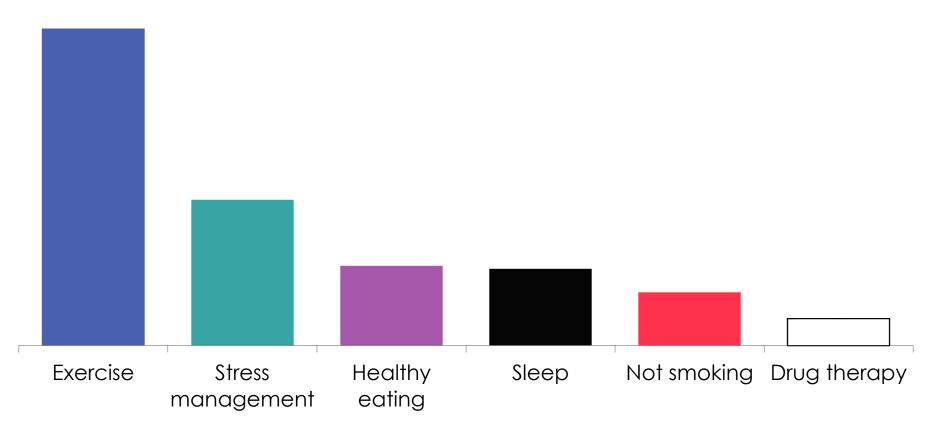




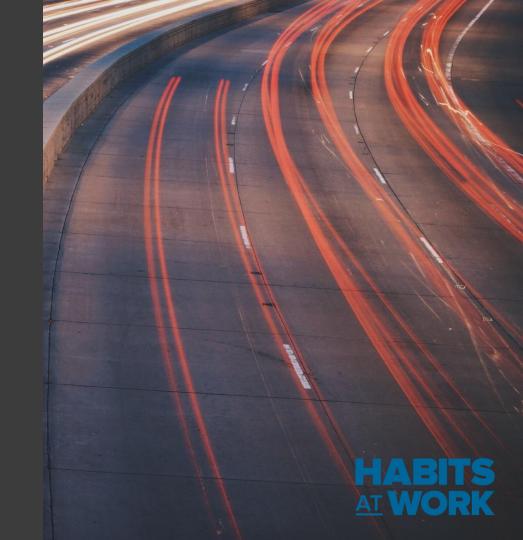




### **BRATLAB Impact Index**



How do we get people to change behaviour?



# How do we get people to practice Pivotal Habits?

#### ... in a way that leaves them fully engaged?

# FOURPOWERS



## CAPABILITY



## MOTIVATION



## BARRIERS



## TEMPTATION

### Capability



### Motivation | Temptation

#### Capability+Motivation

#### **Barriers + Temptation**



#### **Barriers + Temptation**

#### Capability+Motivation

Change

#### **OUR FORMULA FOR HABIT CHANGE**

#### Capability Confidence + Competence

### **Barriers**

Static Impediments to Action

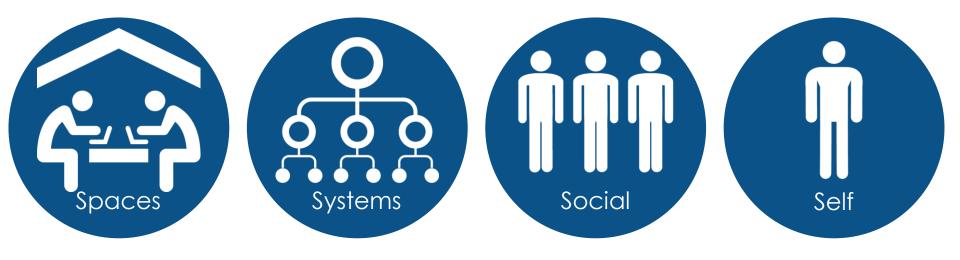


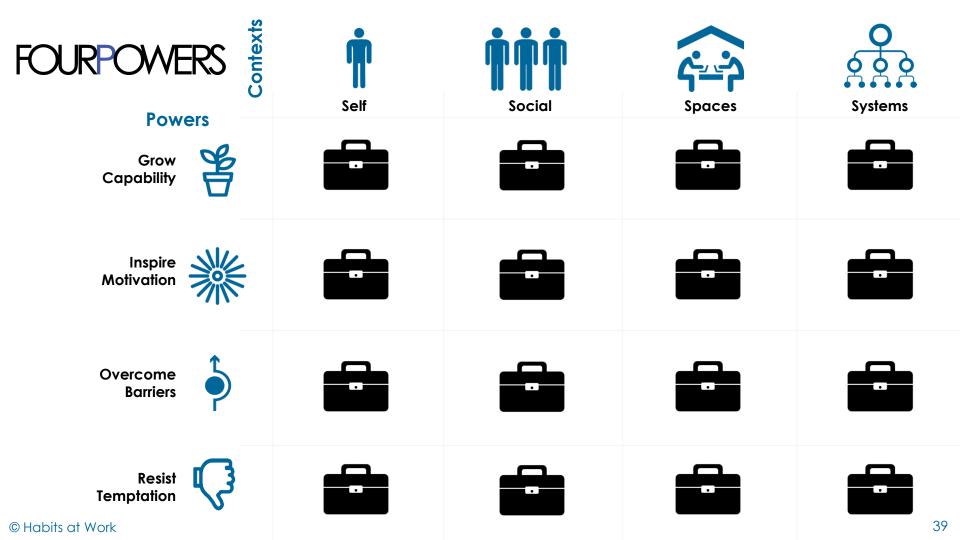
#### **Motivation** Compulsion to Act

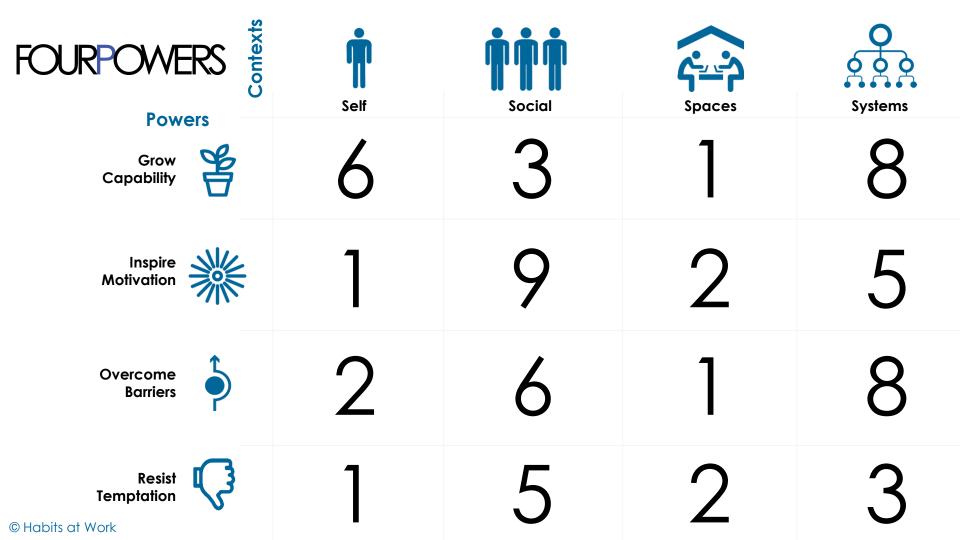


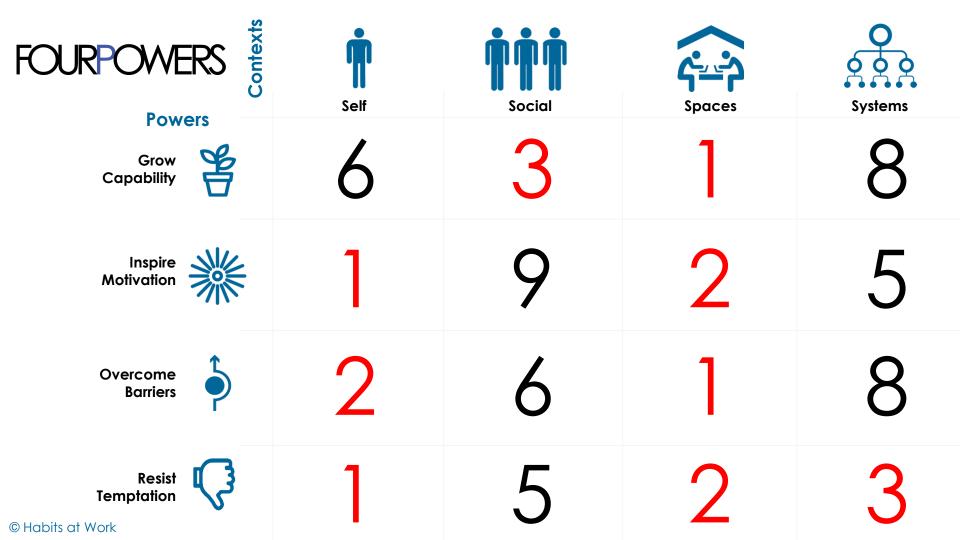
**Active Distractions from Action** 

#### **LIFE CONTEXTS**





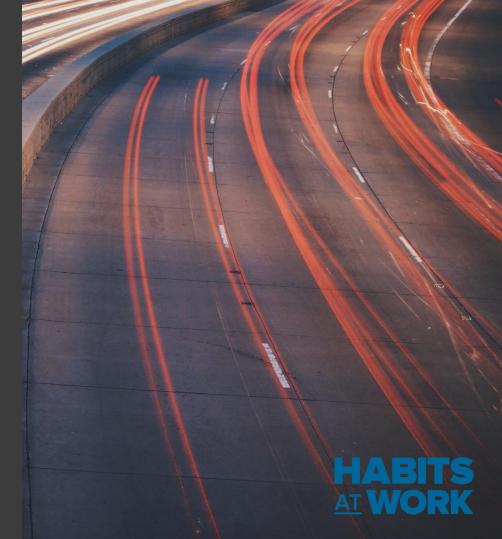




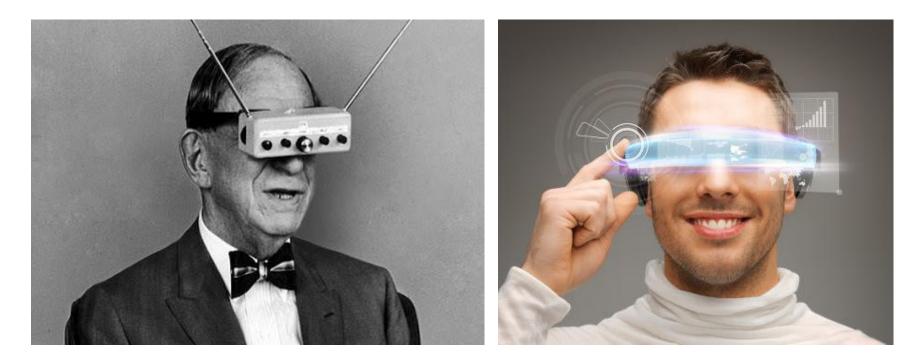


Which Influence Methods are best?

# How do we reliably measure behaviour?



#### Wearable tech is evolving quickly

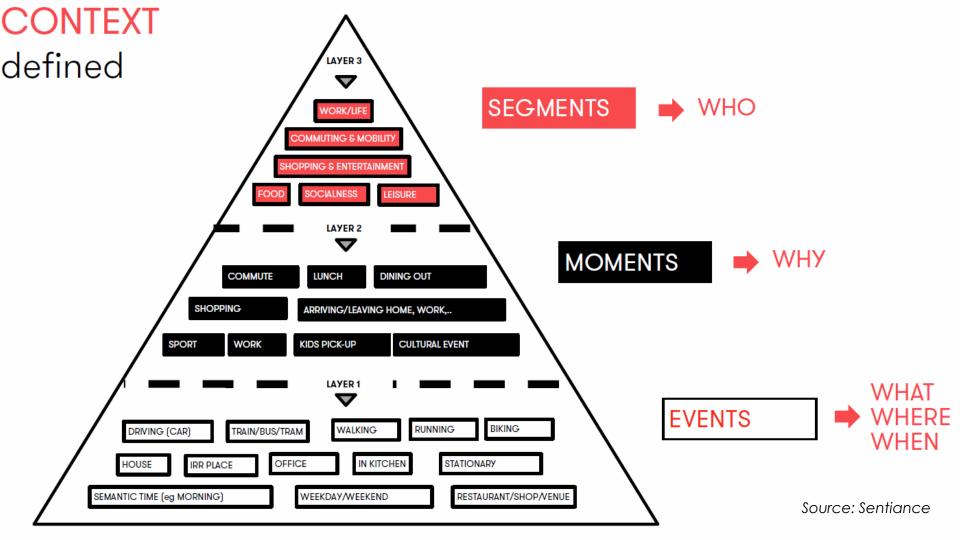


#### Measurements already open to us

Biometrics	Behaviour	Other
Heart rate/pulse	Steps	Goal progress
Heart rate variability (HRV)	Ascent/Decent (Floors)	Posture and balance
Body composition	Calories	Falls (in the elderly)
Weight	Distance	Coughing
Girth	Activity time	Contractions
V02 Max	Sleep duration	Impacts to head (forces)
Blood pressure	Sleep quality (N3/light/REM)	Pollution
Body temp	Swimming strokes	Location
Respiration rate and patterns	Swimming lengths	Pressure distribution
Galvanic skin responses	Light exposure (pre-sleep)	Weight shift information
ECG/EKG	UV exposure	
EEG	Pace/speed/cadence	
Ankle curvature		

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#### **Context Segmentation**

**BEHAVIOR SEGMENTS** 

Rural home City home Town home Rural worker City worker Town worker Homeworker Work traveller Night worker Night owl Early bird Workaholic Shopaholic Recently moved home Recently changed job **MOBILITY SEGMENTS** Long commute Normal commute Easy commute Green commuter Short commute Heavy commute Mobility: high Mobility: moderate Mobility: limited Die-hard driver Public transport user Frequent flyer

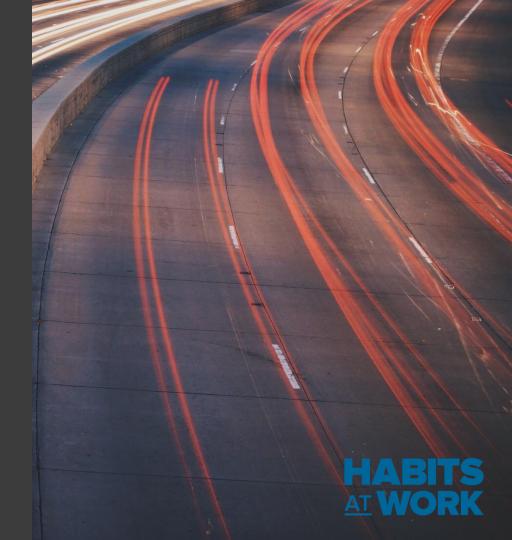
#### **Context Segmentation**

#### LIFESTYLE SEGMENTS

Full-time worker Part-time worker Physical activity: high Physical activity: moderate Physical activity: limited Sportive Healthy walker Healthy biker **Resto-lover** Couch potato Dog walker Culture buff

Social activity: high Social activity: moderate Social activity: limited Student/teacher Late worker Clubber Brand loyalty Brand loyalty: restaurant/bar Brand loyalty: supermarket Brand loyalty: petrol stations Uber parent Work-Life balance

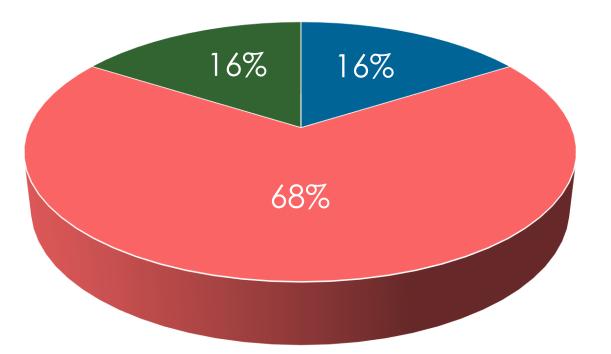
# Is the market ready (and are we)?



#### The move to predictive risk models

Identification and evaluation of current and presenting risks Prediction of risk profiles, and avoidance of future risk

#### The move to predictive risk models



- Using predictive models
- Thinking about predictive models
- Neither

Source: Society of Actuaries - Understanding the Product Development Process of Life Insurance and Annuity Companies, March 2017

#### Market already exists

John Hancock. Vitality





# Questions?

