Wearable e-noses for health & wellbeing:
Designing for a real user need

Quantified Self Show & Tell #21
29th October 2013
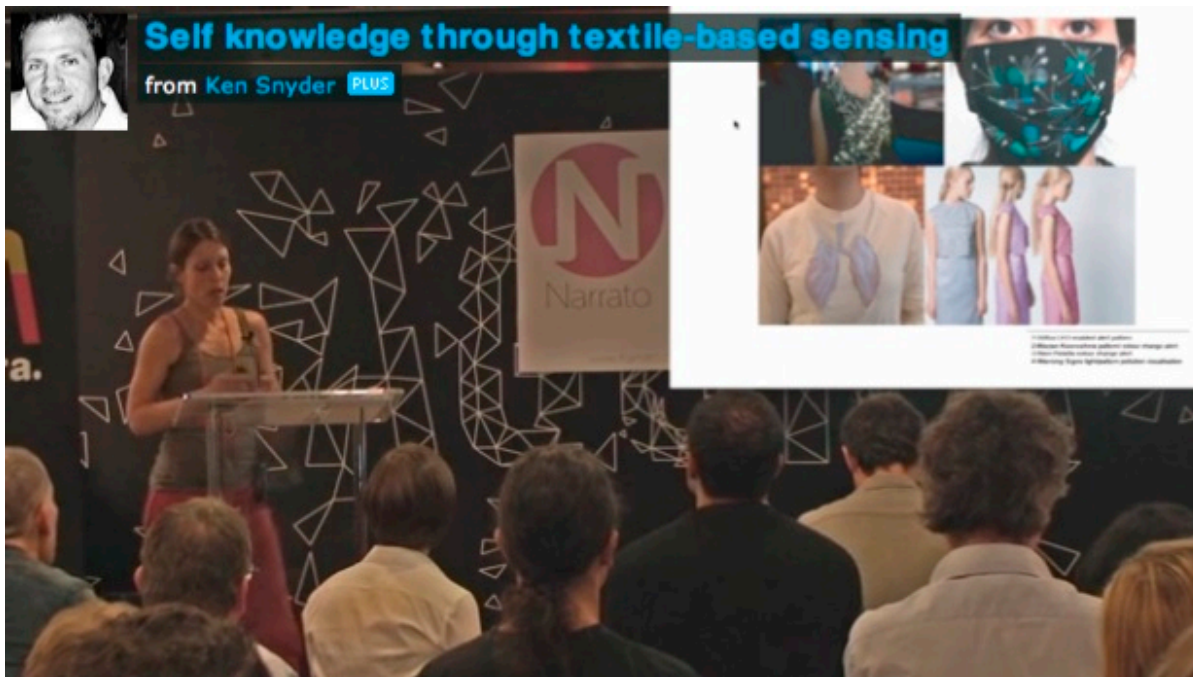
Anne Prahl

Self-knowledge through **textile-based sensing?**

Carbon electrode

Quantified Self London Show & Tell #17
18th June 2013

Anne Prahl

Self knowledge through textile-based sensing
from Ken Snyder PLUS

- Lack of choice/ *customisation* opportunities

- Device location *on body*

- *Device position* on garment/ accessory

- *Remembering* to wear device

- Wearable device *carriers*

- Device *visibility*

- Weather *conditions*

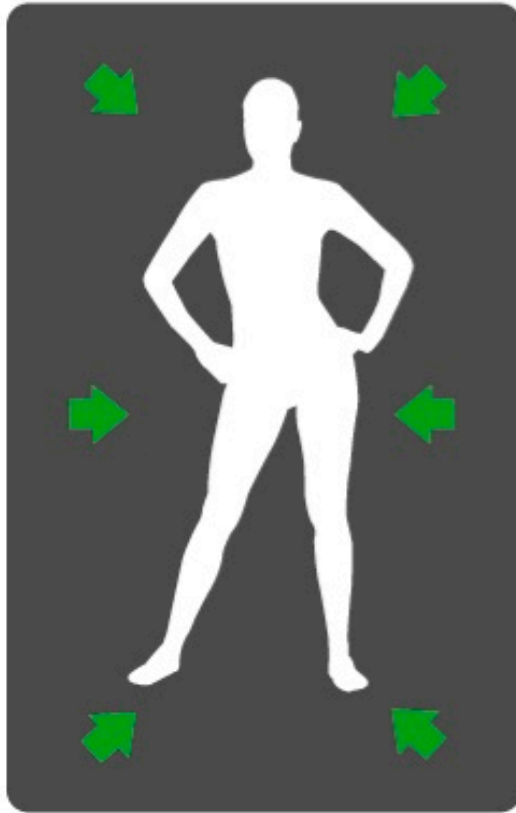**Issues:** *Global healthcare burden & non-communicable diseases*

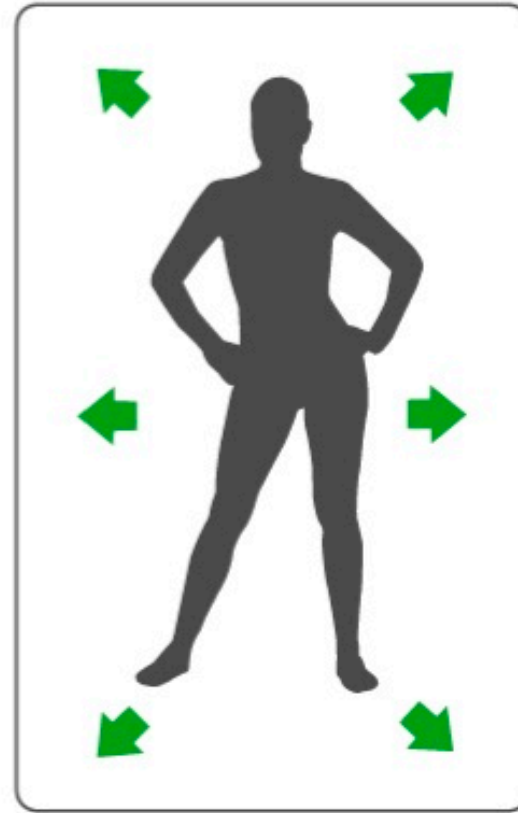**Opportunities:** *Active Prevention with 'digital health tools'*

PROTECTION

DETECTION, MONITORING & EARLY DIAGNOSIS
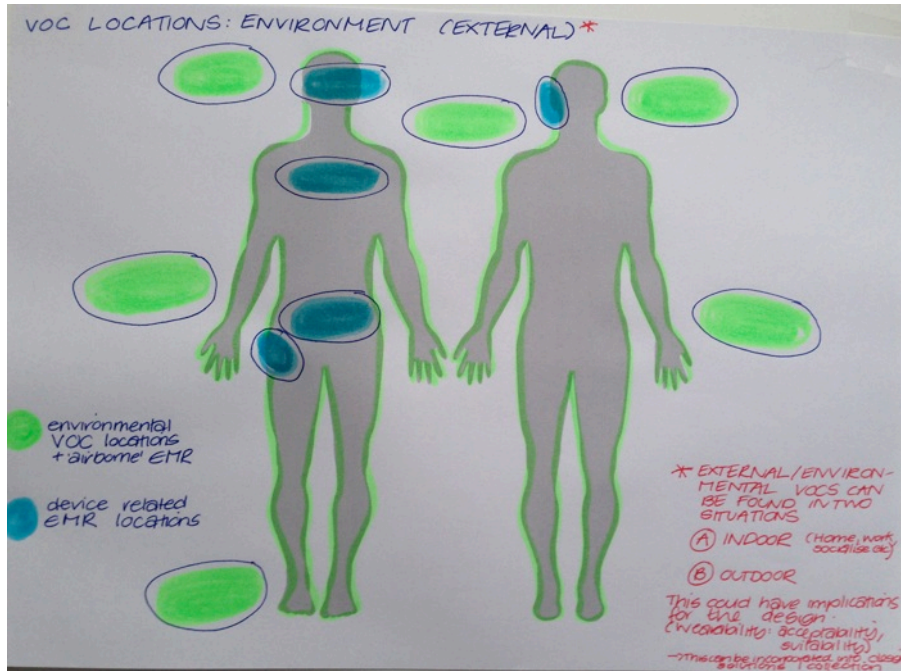
ENVIRONMENT

SELF

external stimuli

internal stimuli

EXTERNAL STIMULI: VOCs and EMR

INTERNAL STIMULI: VOCs
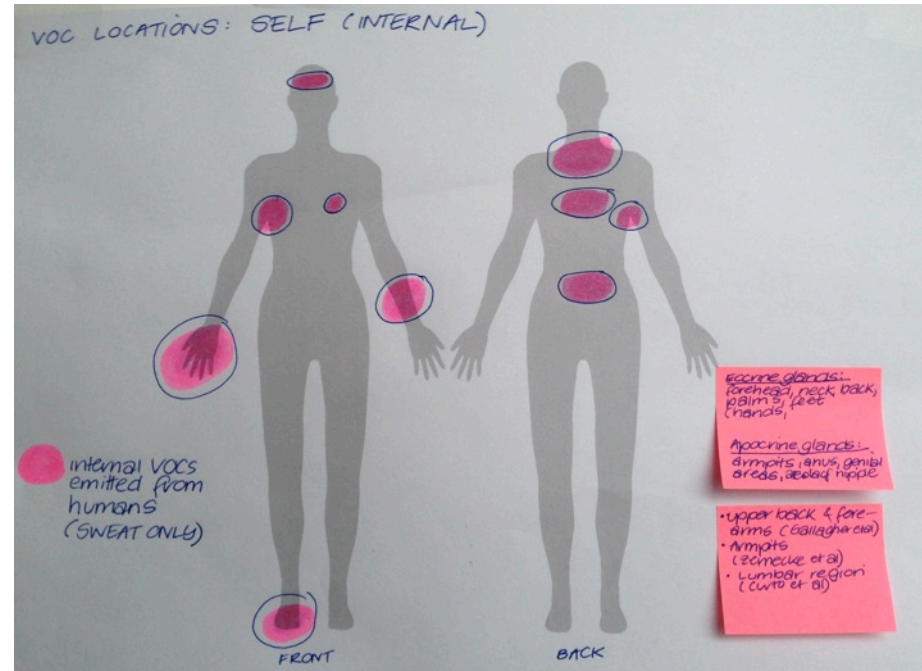
Wearable e-nose: *EXTERNAL*

IMMEDIATE
USER ACTION

SMARTPHONE/
INTERFACE
DATA DISPLAY
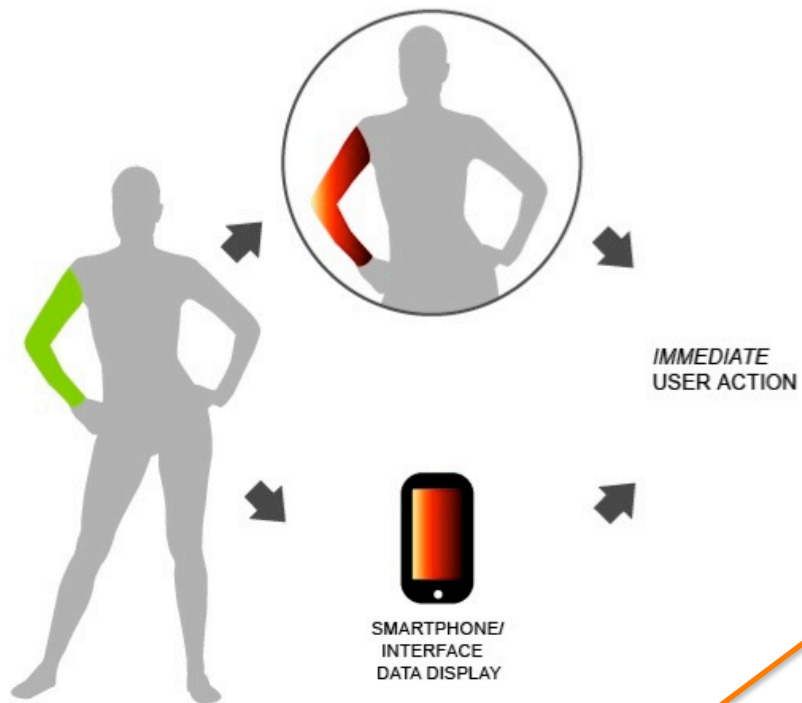
Wearable e-nose*: INTERNAL*

WEARABLE E-NOSE:
SENSE & REACT

USER ACTION
based on
INTERPRETED DATA

SMARTPHONE/
INTERFACE
DATA DISPLAY
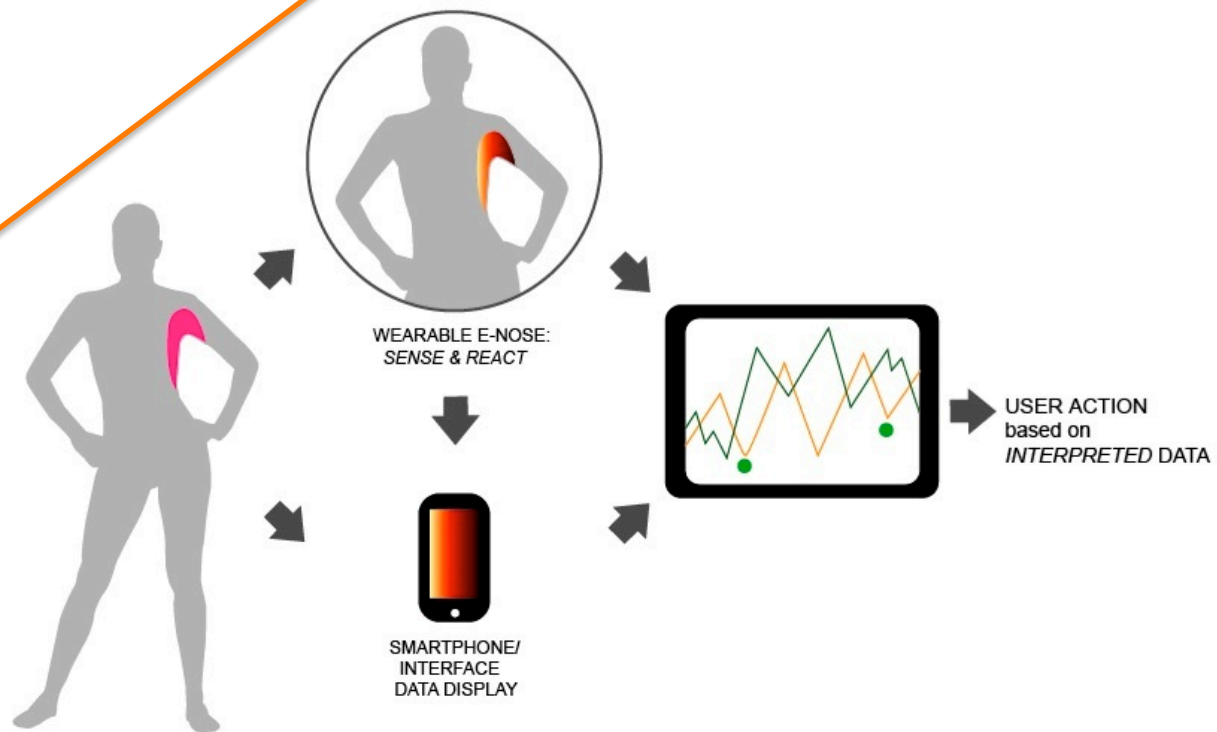
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