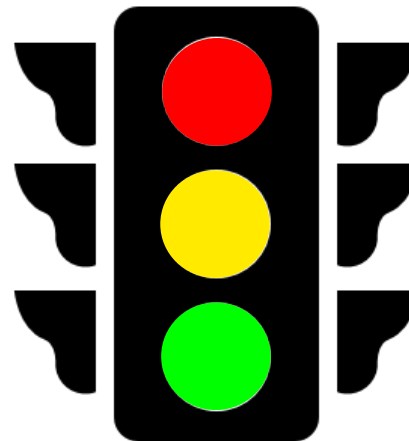


Machine Learning Driven Insight: Emotional AI

Linda Preve

Design Thinking Facilitator and Digital Designer





Sadness

Happiness

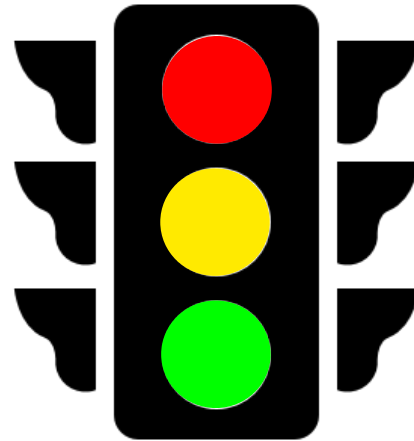
Anger

Confusion

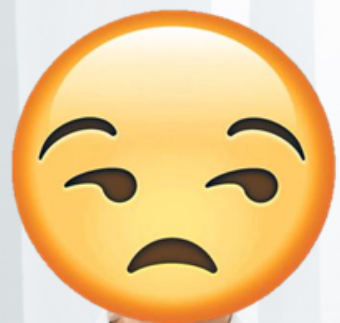
Joy

Stress

Frustration



Surprise



FACIAL EXPRESSION

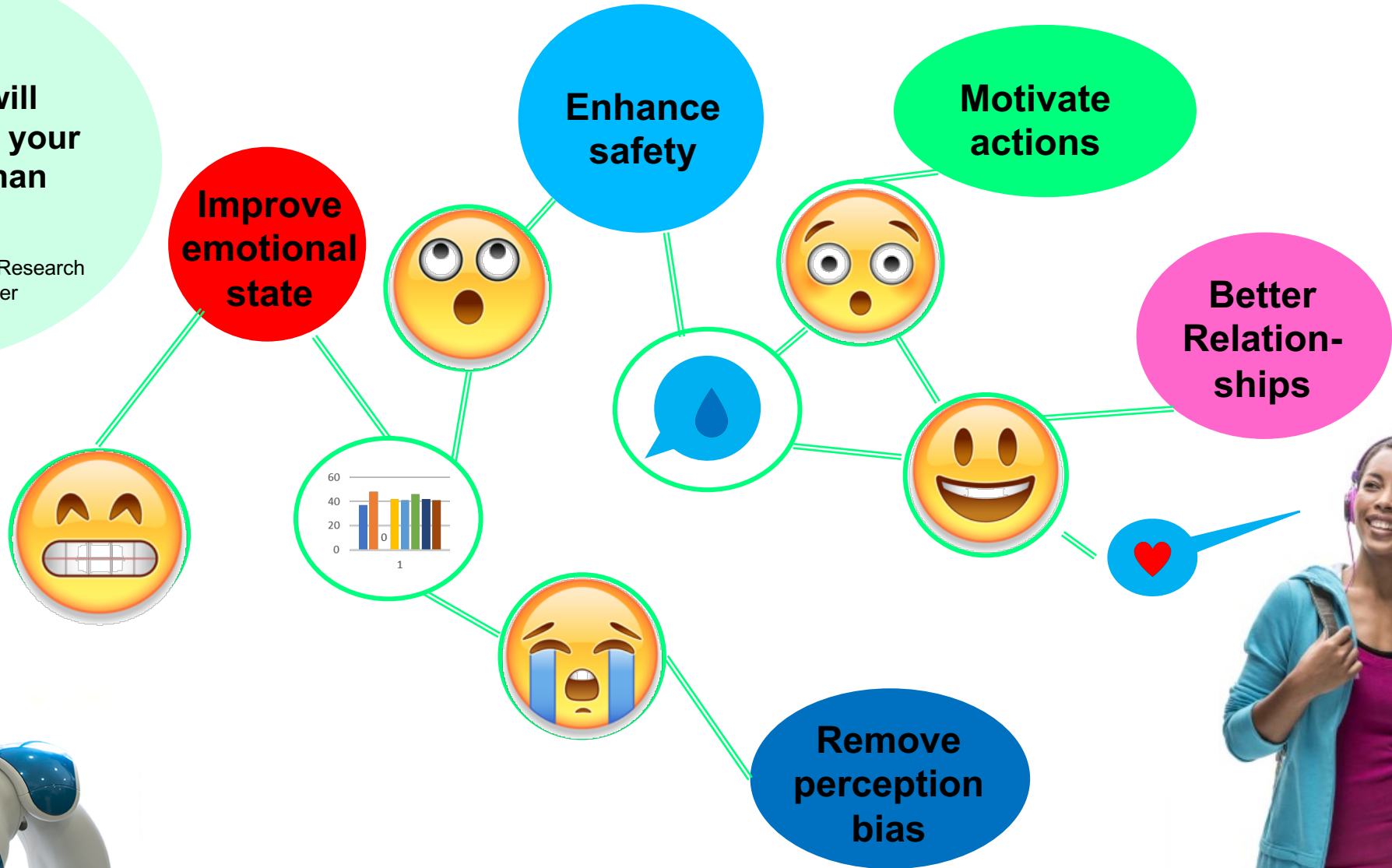
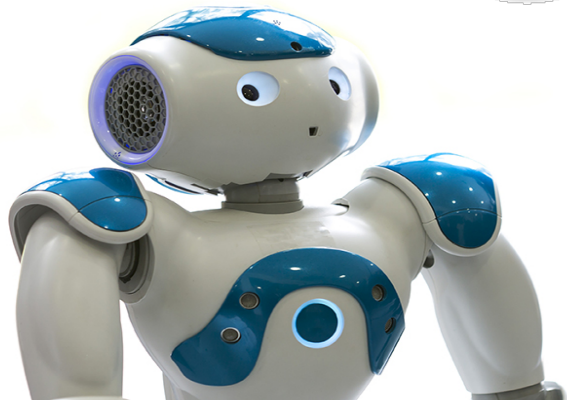
CONTENT -
WORDS

TONE

WELCOME TO EMOTIONAL AI

“By 2022, your personal device will know more about your emotional state than your own family”

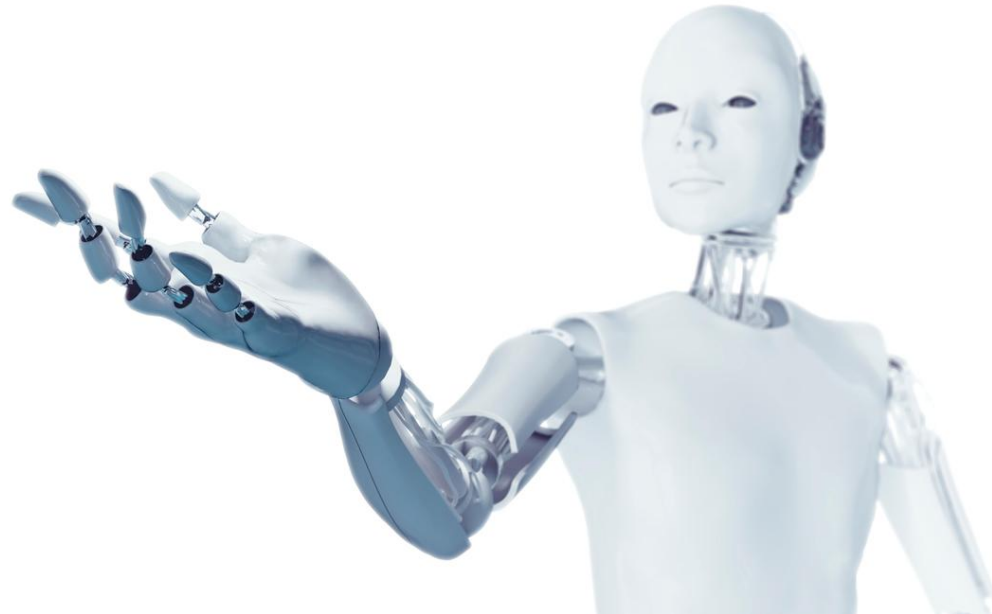
[Annette Zimmermann](#), Research Vice President at Gartner



OUR EXPERIMENT

PROBLEM STATEMENT:

HOW MIGHT WE HELP JOB SEEKERS
IMPROVE THEIR INTERVIEW
PERFORMANCE?



CONCEPT POSTER IDEA: COACHI

Digital Coach Interviewer that combines AI with insights from behavioural psychology

Solution:



CHATBOT



FACIAL EXPRESSION
ANALYSIS



TONE ANALYSIS

Digital interviewer: COACHi

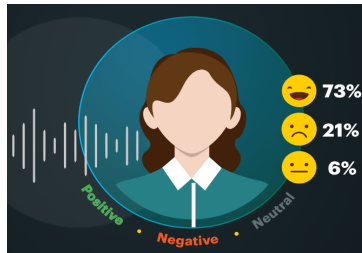


BUT HOW DO WE PROVE THE VALUE OF?

We use the Digital Liquid Lean approach to prove the business value through **experimentation**

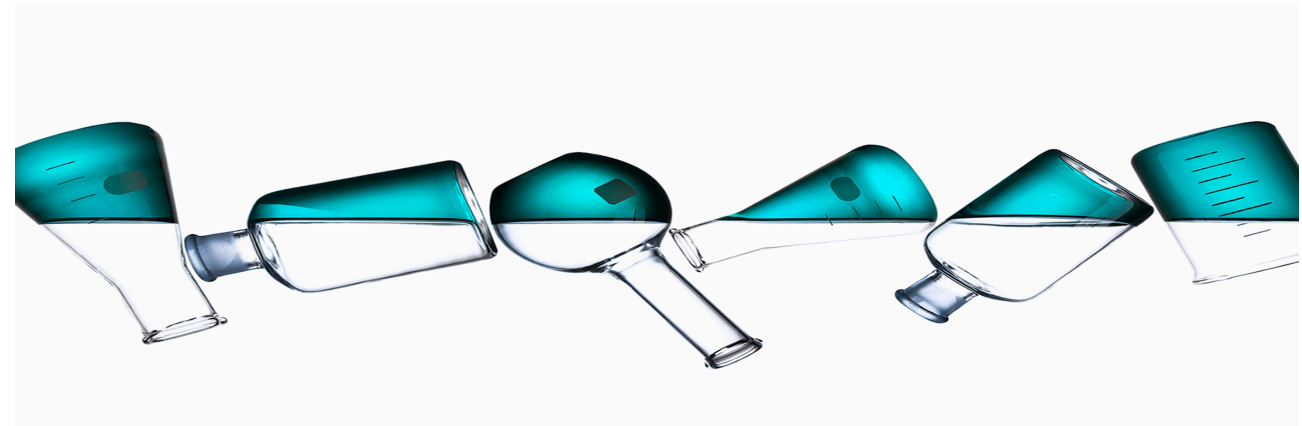
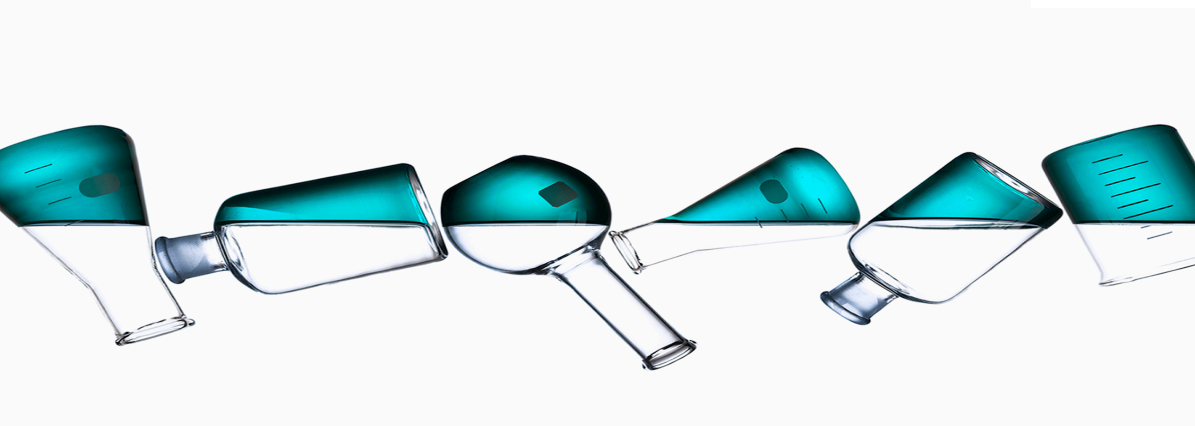
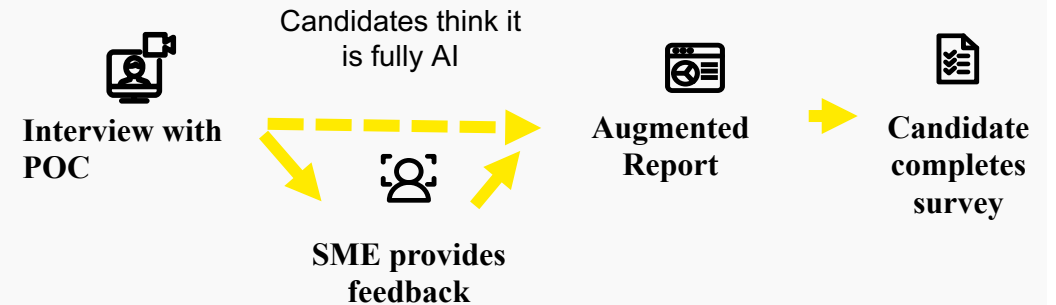
HYPOTHESES TO TEST

- H1** People **WANT** to use this tool
- H2** User see the **VALUE** in the results provided by the tool
- H3** The tool **WORKS** as expected



EXPERIMENTS TO PROVE THEM

Simulate how the end product would behave to prove users **WANT** it, **VALUE** it and **it WORKS**



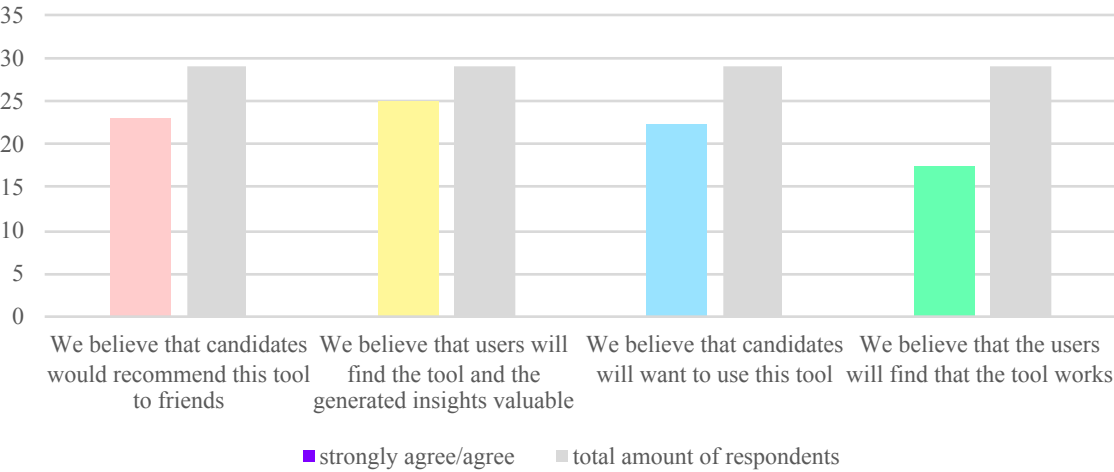
OUR EXPERIMENT IN 60 SECONDS



RESULTS - DATA

Our Belief	Metric	Validation Criteria	Result	
We believe that candidates would recommend this tool to friends	NPS scores	NPS Score >50% of people recommend the tool	80%	✓
We believe that users will find the tool and the generated insights valuable	Post survey scores	Feedback report shows >50% score in the “Value” section	85%	✓
We believe that candidates will want to use this tool	Post survey scores	Feedback report shows >50% score in the “want” section	81%	✓
We believe that the users will find that the tool works	Post survey scores	feedback report shows > 50% score in the works section	73%	✓

Comparison of strongly agree/agree v overall



Participants across 4 geographies and 3 languages



EMOTIONAL AI AS A SERVICE

EMOTIONAL AI - GENERATED VALUE



Communication

SENSE & PERCEIVE

Conversations adapted on emotion analysis



Responsive Actions

REASON & ACT

Infer actions from emotional clues



Monitoring

KNOW & LEARN

Optimise/learn behaviour based on ongoing emotions data collection

HOW MIGHT WE GO BEYOND WORDS AND USE EMOTIONAL AI IN CLINICAL TRIALS

IMAGINE A TECHNOLOGY
WOULD UNDERSTAND
HOW A PATIENT FEELS ...



Communication patient-consultant

Drop outs

Patient feedback collection

Bias

Data recording accuracy

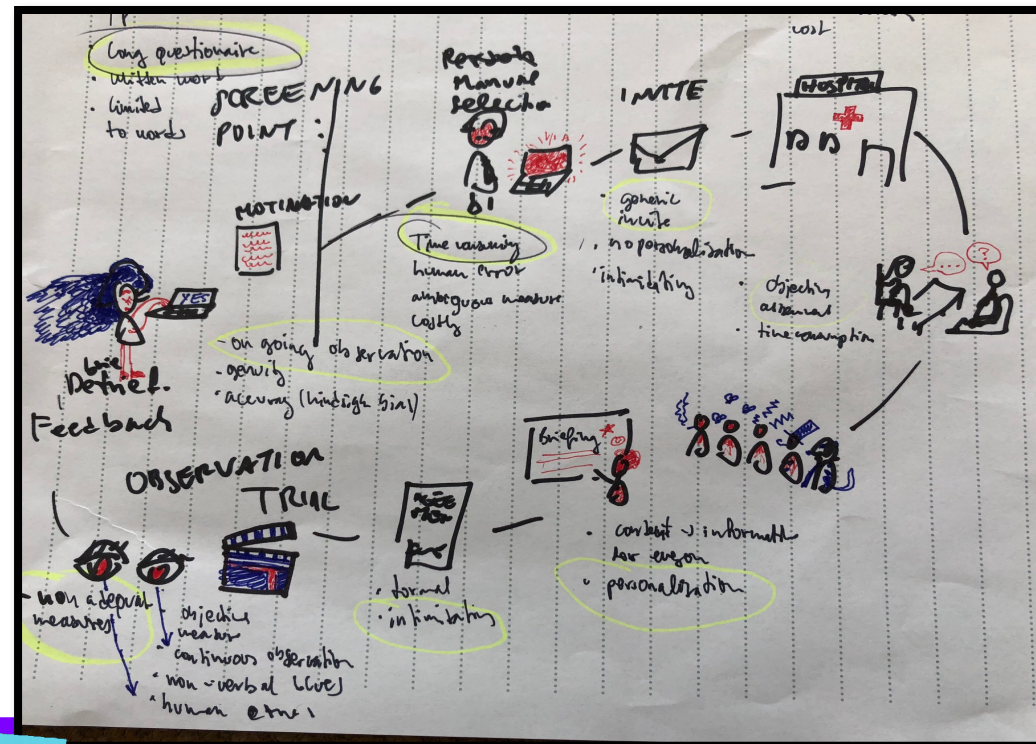
HMW reduce time and accuracy of recruiting trial participants

HMW personalise communication

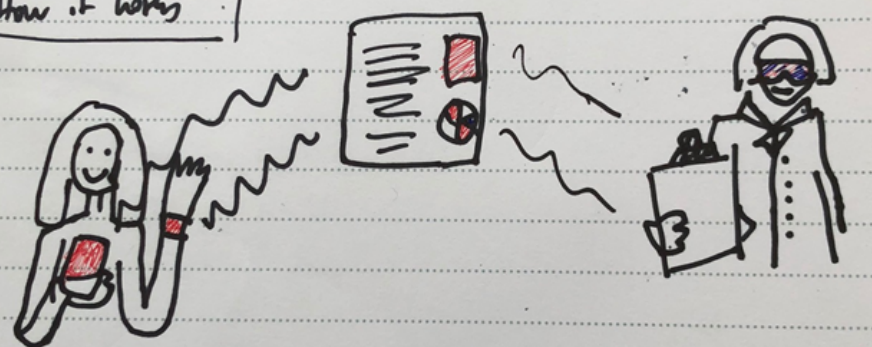
HMW achieve objective assessment and use objective measures

HMW establish an ongoing observation

HMW make the process less intimidating



THE CONCEPT POSTER

NAME		
EM-DOC		
FOR ?	PROBLEM?	BIG IDEA
PHARMA COMP TRIAL TAKERS AGENCY	objective, fast efficient and ongoing measure in trial	win AI + EA out with healthy app measures
How it works		
		
WHY IT COULD FAIL	PROTOTYPE	MEASURE
Lack of commitment data protection technical accuracy	Question + emp measure → export 1 video → export 2 ex 1 = ex 2	



Linda Preve

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THANK YOU

Accenture Life Sciences

Patient Inspired. Outcomes Driven.