

*Welkom op het*

**SANA.**

**SUMMIT**



deel je kennis en inzichten  
**#SANASUMMIT**

FUTURE OF HEALTH – LUCIEN ENGELEN

VERBINDING – JAN RAMAEKERS, FOUNDER SANANET

GEZAMENLIJKE ONTWIKKELING VAN EEN E-COACH  
GOVERT VELDHIJZEN, MDL-ARTS

INTEGRATIE EN THUISMETEN VAN VITALE WAARDEN  
CASPER EURLINGS, CARDIOLOOG  
LAURA BREUKEL, CARDIOLOOG  
INGRID WEGMAN, VERPLEEGKUNDIG SPECIALIST

*14.45 – 15.30 pauze*

DE INZET VAN AI IN DE ZORG  
ANDRE DEKKER, KLINISCH FYSICUS

TELEMONITORING OP DE WERKVLOER: FABELS EN FEITEN  
THEA KORPERSHOEK, VERPLEEGKUNDIG SPECIALIST  
MARIEKE ZWIJNENBURG, MDL-VERPLEEGKUNDIGE

ZORGEVOLUTIE: DE IMPACT VAN 1.600(!) PATIËNTEN IN DE  
VIRTUELE LONGKLINIEK OLVG  
PAUL BRESSER, LONGARTS

*17.00 Afsluiting en Borrel*



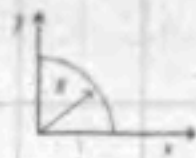
Lucian Engler  
TransformHealth

$$a^2 + b^2 = c^2$$

$$L = \frac{\pi R}{2}$$

$$\lim_{x \rightarrow x_0} [f(x) + g(x)]$$

$$s = \sqrt{r^2 + h^2}$$



$$\pi = 3.141592$$

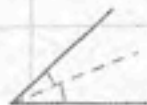
$$a(b+c) = ab + ac$$

$$|a| = |-a|$$

$$\pi = 3.141592$$

$$z = \sqrt{r^2 + h^2}$$

$$\sec(-x) = \sec(x)$$

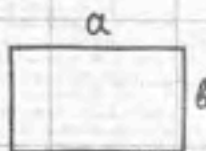


$$\frac{n!}{r!(n-r)!}$$

$$|a| = |-a|$$

$$b^2 = (a+b)^2$$

$$y_0 = bx_n$$



$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

$$C = 2\pi r$$

$$A + B + C = 180^\circ$$

$$a(b+c) = ab + ac$$

$$\log_a x = \frac{\log_e x}{\log_e a}$$

$$\lim_{x \rightarrow x_0} [f(x) + g(x)]$$

$$y = f(x)$$

$$\operatorname{ctg} \frac{d}{2} = \frac{1 + \cos d}{\sin d}$$

$$(ab)^n = a^n b^n$$

$$L = \frac{\pi R}{2}$$

$$b^2 = (a+b)^2$$

$$\frac{a+b}{c} = \frac{a}{c} + \frac{b}{c}$$



$$a^2 + b^2 = c^2$$

$$ab + ac = a(b+c)$$

$$(ab)^n = a^n b^n$$

$$V = \frac{4}{3} \pi r^3$$

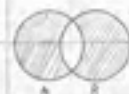
$$C = 2\pi R$$



$$\triangle ABC \sim \triangle ADC$$

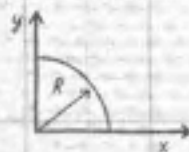


$$\log_a x = \frac{\log_e x}{\log_e a}$$



$$\frac{n!}{r!(n-r)!}$$

$$\triangle ABC \sim \triangle ADC$$



$$A = S^2$$



$$V = \frac{4}{3} \pi r^3$$

$$\sin^2 \frac{d}{2} = \frac{1 - \cos d}{2}$$

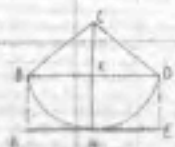


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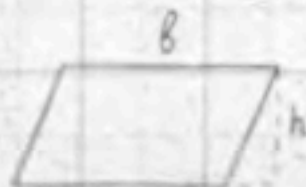


$$\frac{a+b}{c} = \frac{a}{c} + \frac{b}{c}$$

$$C = 2\pi r$$

$$y_0 = bx_n$$

$$y = f(x)$$



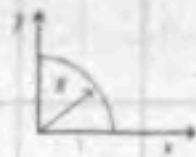
Lucian Engler  
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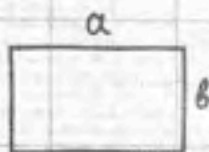


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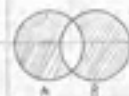
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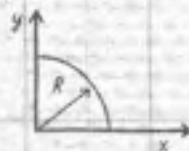


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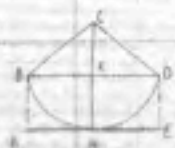


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**Healthcare has a  
plumbers problem**



**Healthcare has a  
plumbers problem**





Lucien Engelen  
Erasmus Universiteit





Lucien Engelen  
Erasmus Universiteit







Lucien Engelen  
Erasmus Universiteit







Radboudumc  
university medical center



Deloitte Center *for*  
the Edge



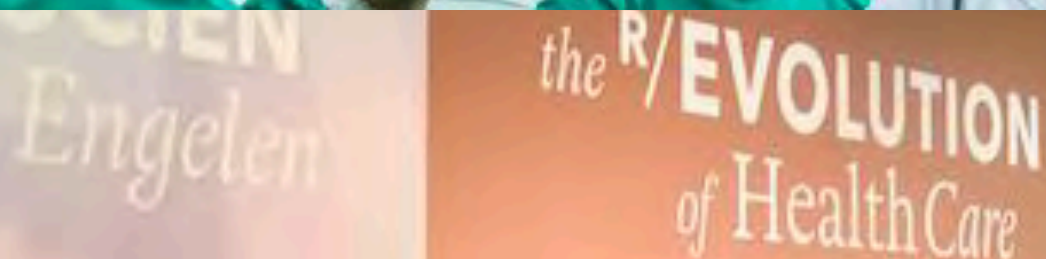
laurentius  
Medical Center



Sigma Theta Tau International  
Honor Society of Nursing



Sigma



Engelen  
the <sup>R</sup>/EVOLUTION  
of Health Care

**Radboud University Medical center**  
Founding Director RShape Center  
**until 31/12/18**

**Deloitte Center for the Edge**  
Edge Fellow (digital) Health(care)  
**as of 1/1/2019**

**Laurentius Medical Center**  
Strategist to Executive Board  
**as of 1/4/2021**

**Sigma Theta Tau**  
Global Ambassador  
Nursing Innovation  
**as of 1/12/2017**

**Global Keynote Speaker**  
125+ per year  
**as of 1/1/2010**









Lucian Engle  
Photography

KTLA



CNN

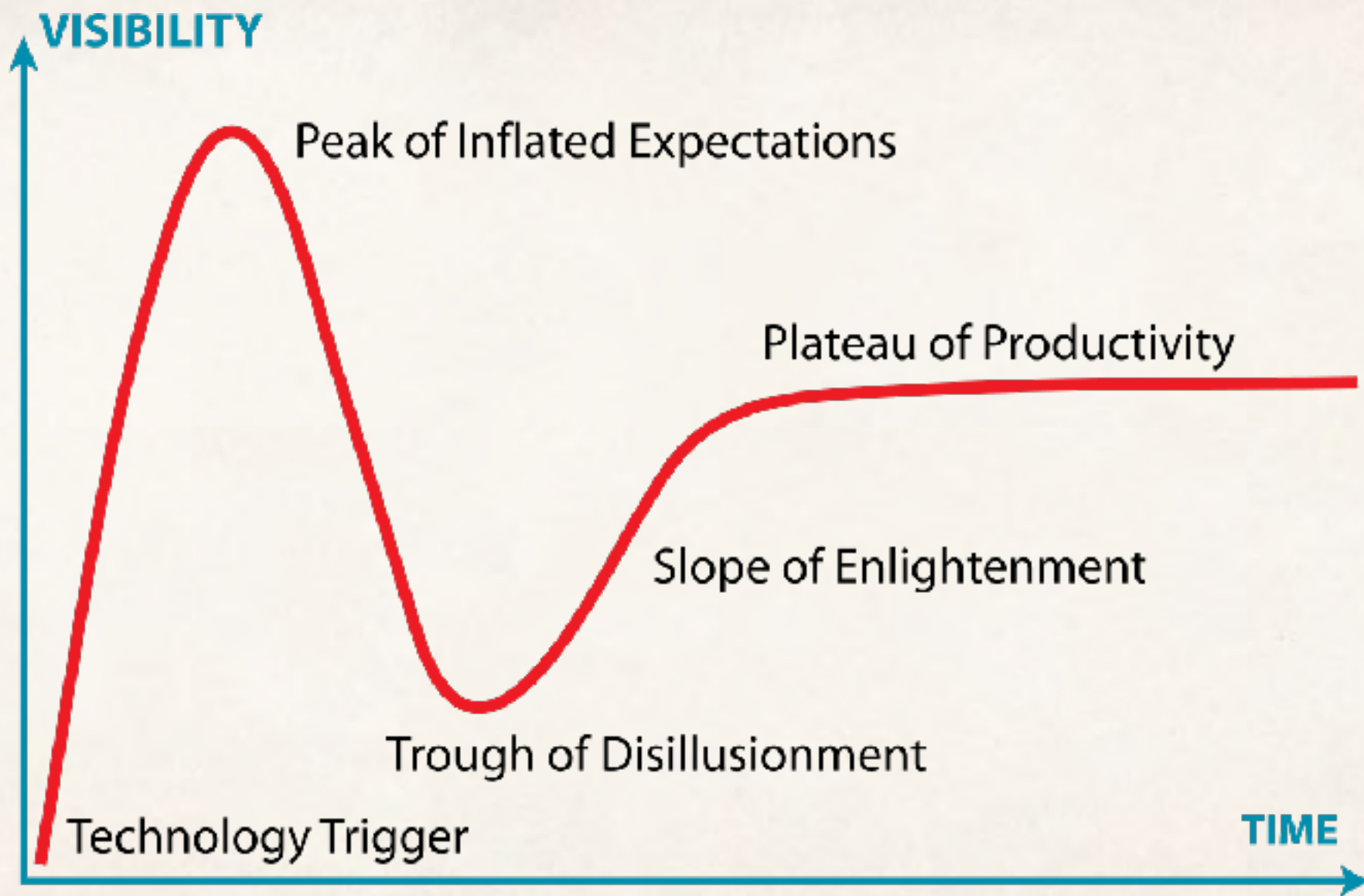


Lucian Engle  
Photography

KTLA

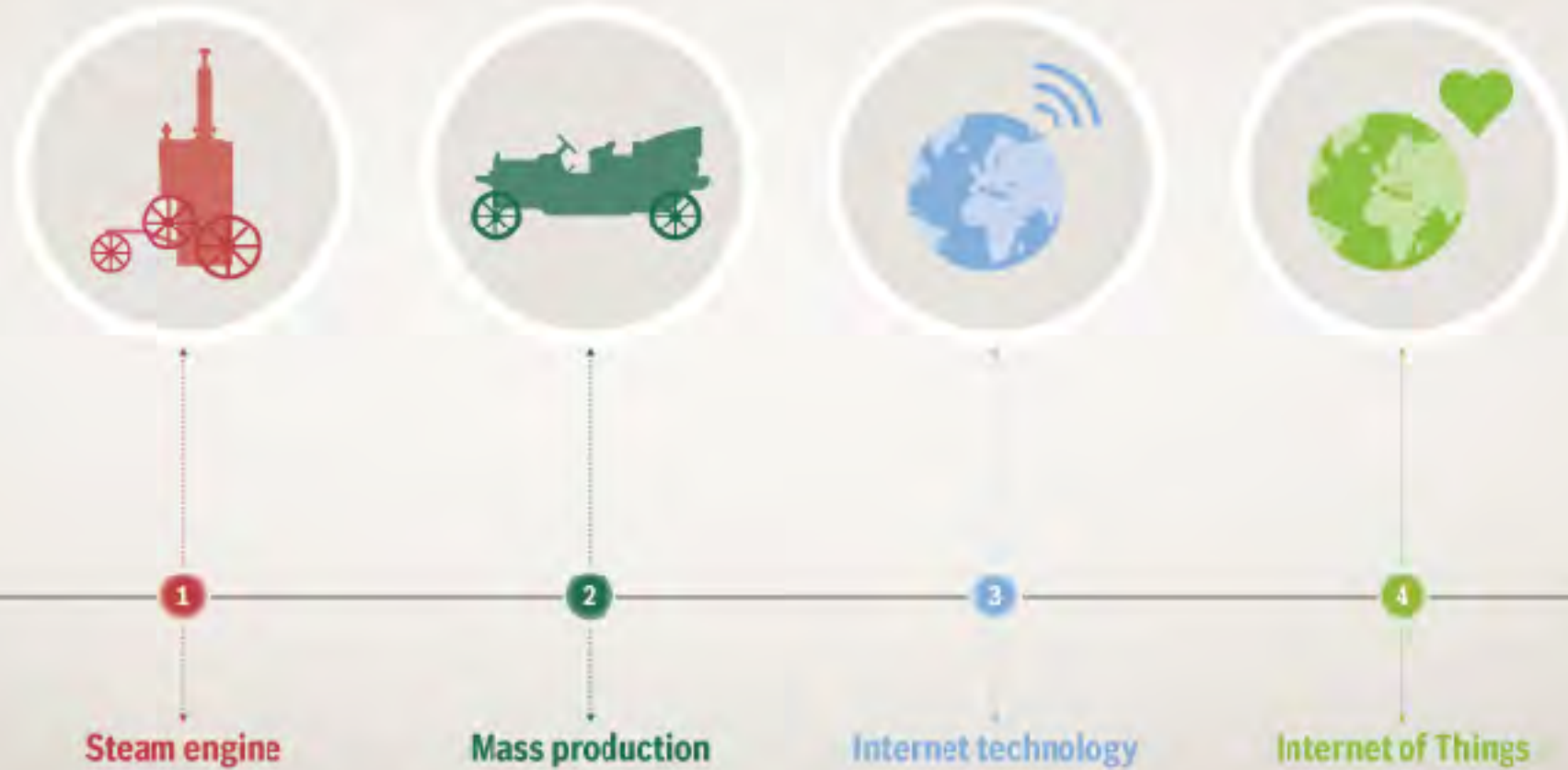


CNN

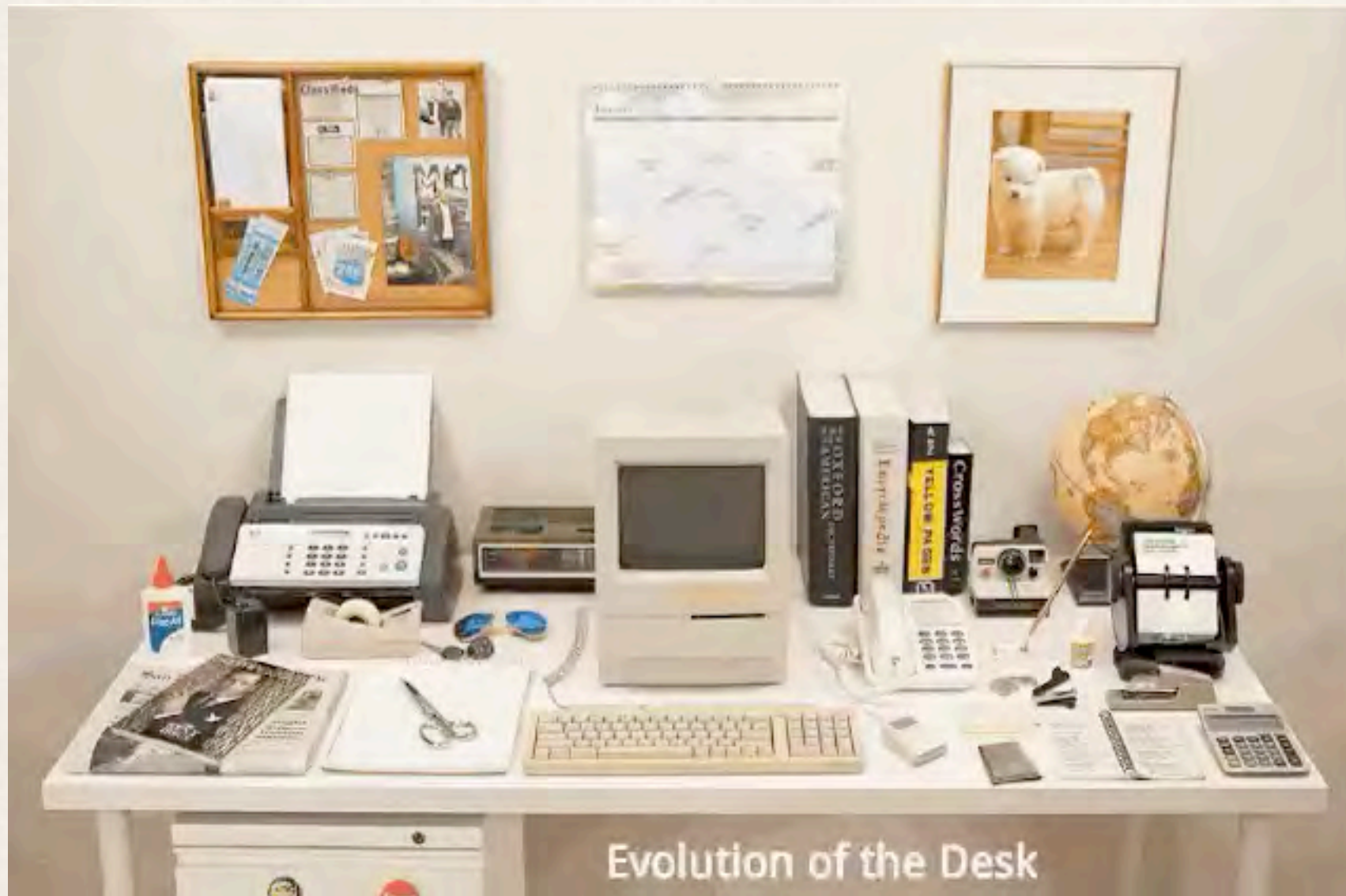


# FOURTH INDUSTRIAL REVOLUTION

Lucien Engelen  
Paradigm Media

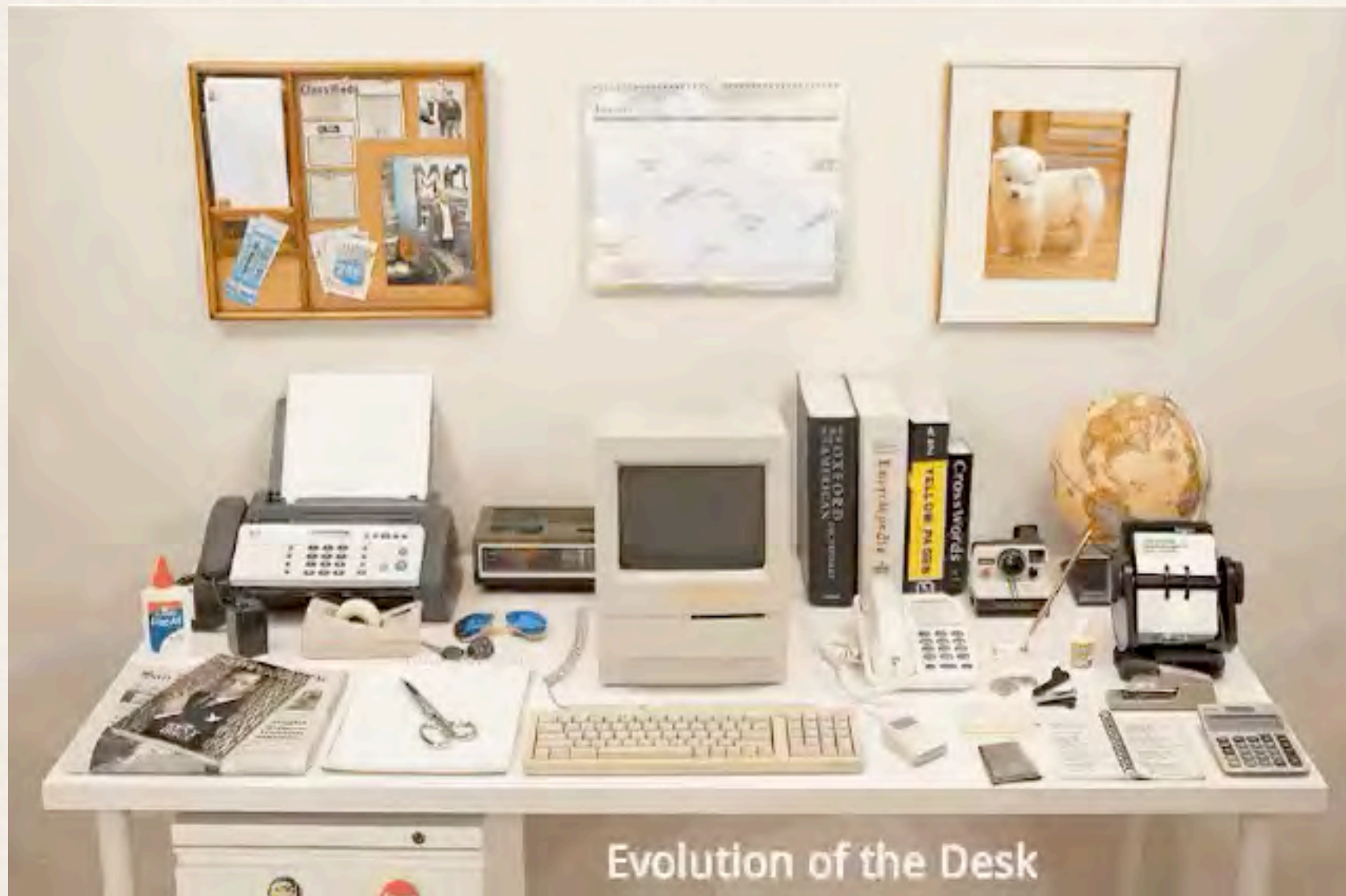






Evolution of the Desk

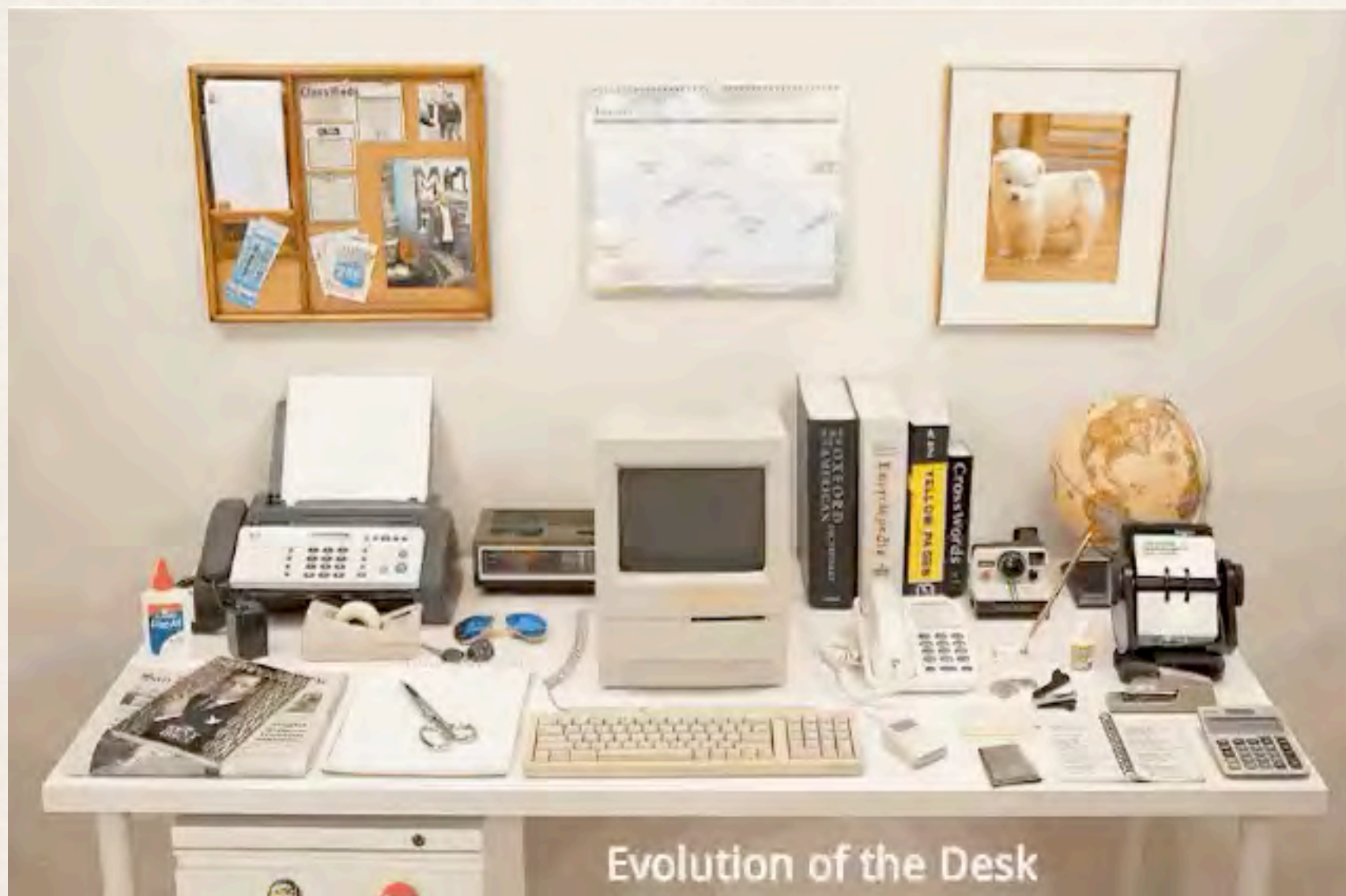
Lucien Engelen  
Transform Health



Evolution of the Desk

Lucian Engelen  
Transform Health





# Apple's AirPods Pro Can Now Function Like a Hearing Aid



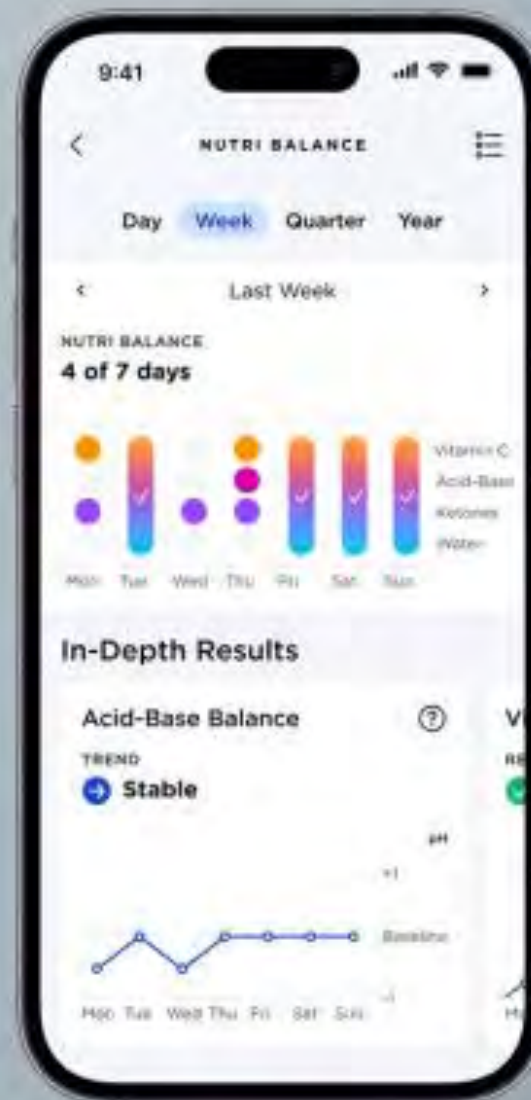
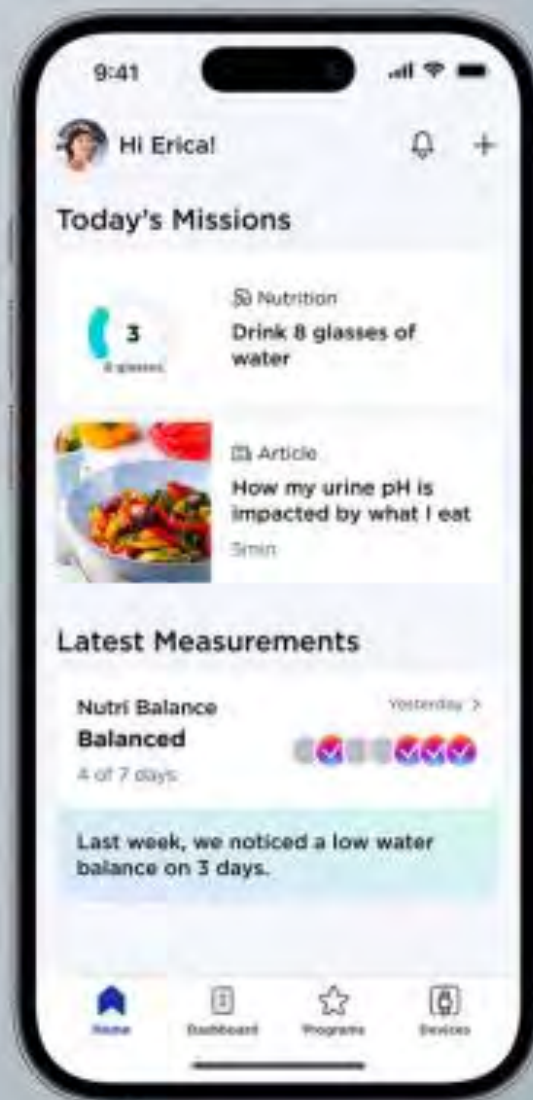
DAVE LECLAIR [@davegleclair](#)

OCT 7, 2021, 9:58 AM EDT | 1 MIN READ



Framesira/Shutterstock.com





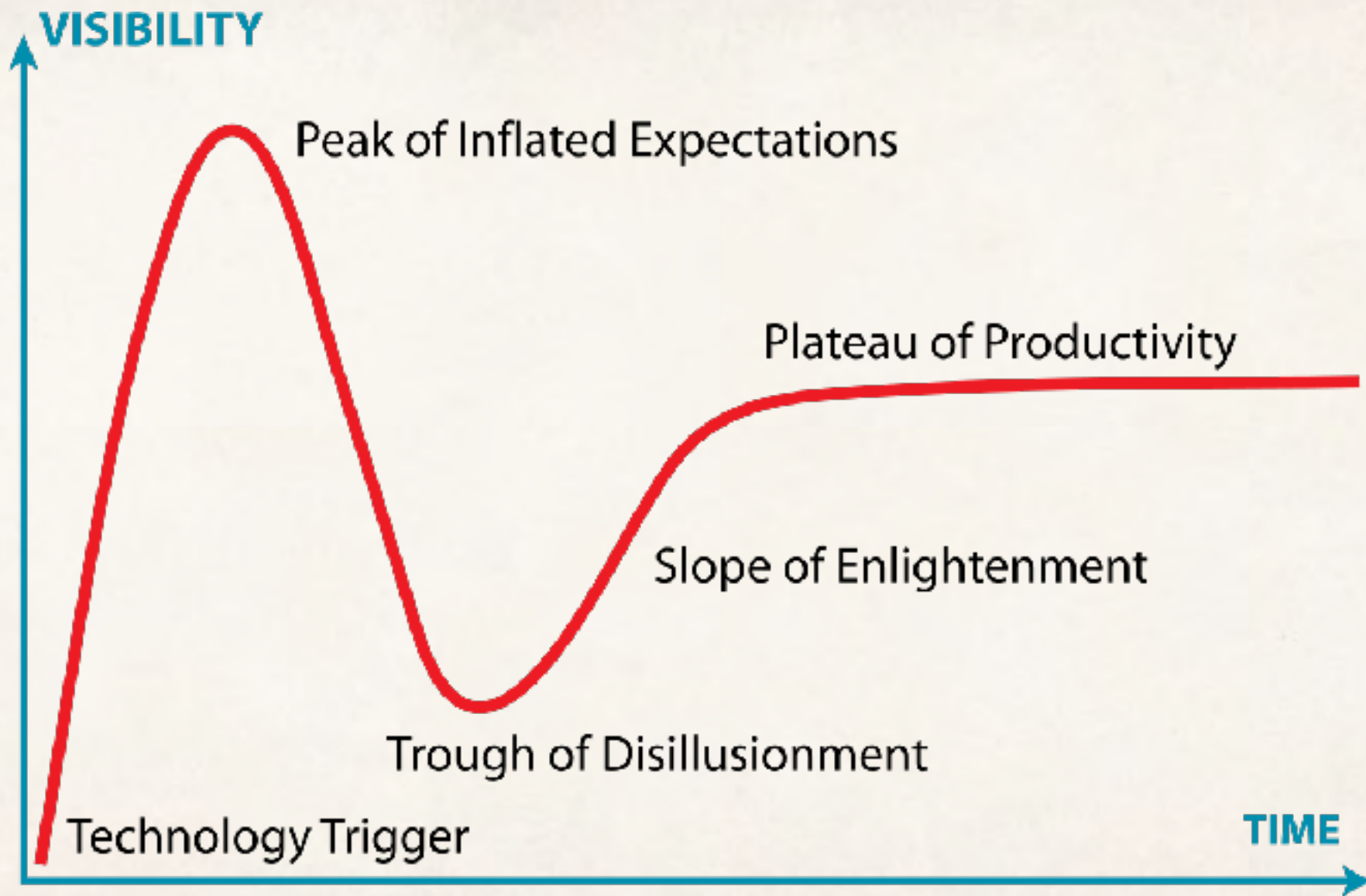




Chinese scientists have built a nuclear battery that can produce power for up to 50 years without being recharged. (Image credit: BetaVolt)











Lucian Eyden





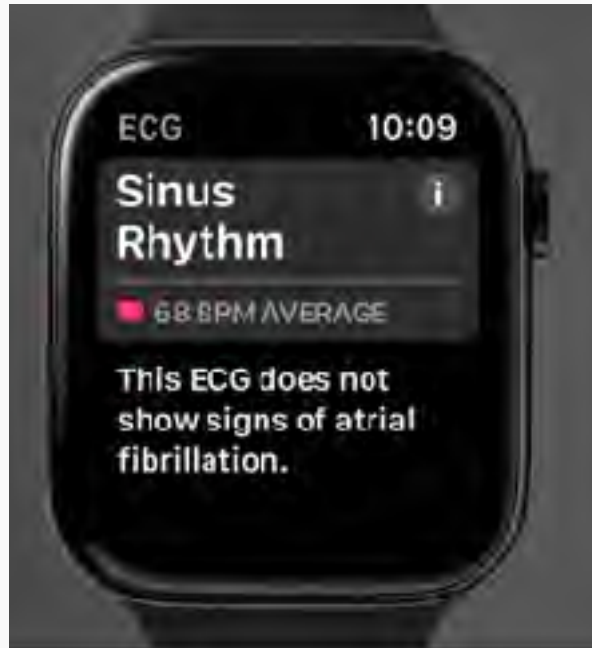






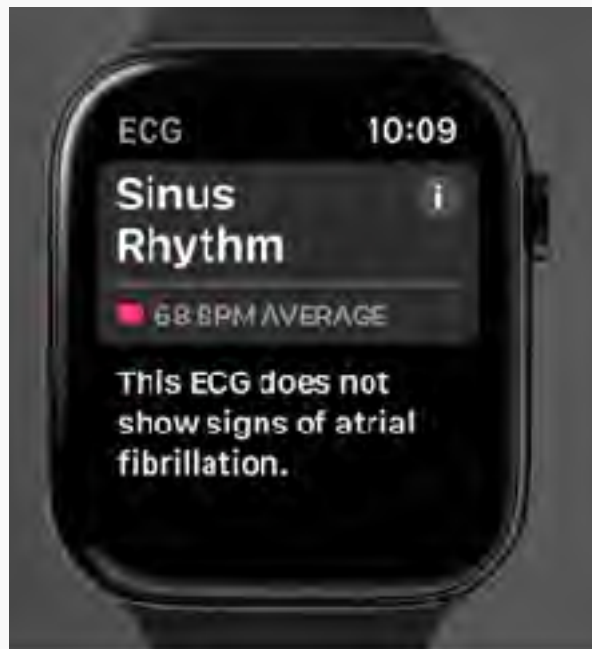












07:33

5G 21

mashable.com

# The next Apple Watch will reportedly add 3 new health sensors for diabetes, blood pressure, and sleep apnea

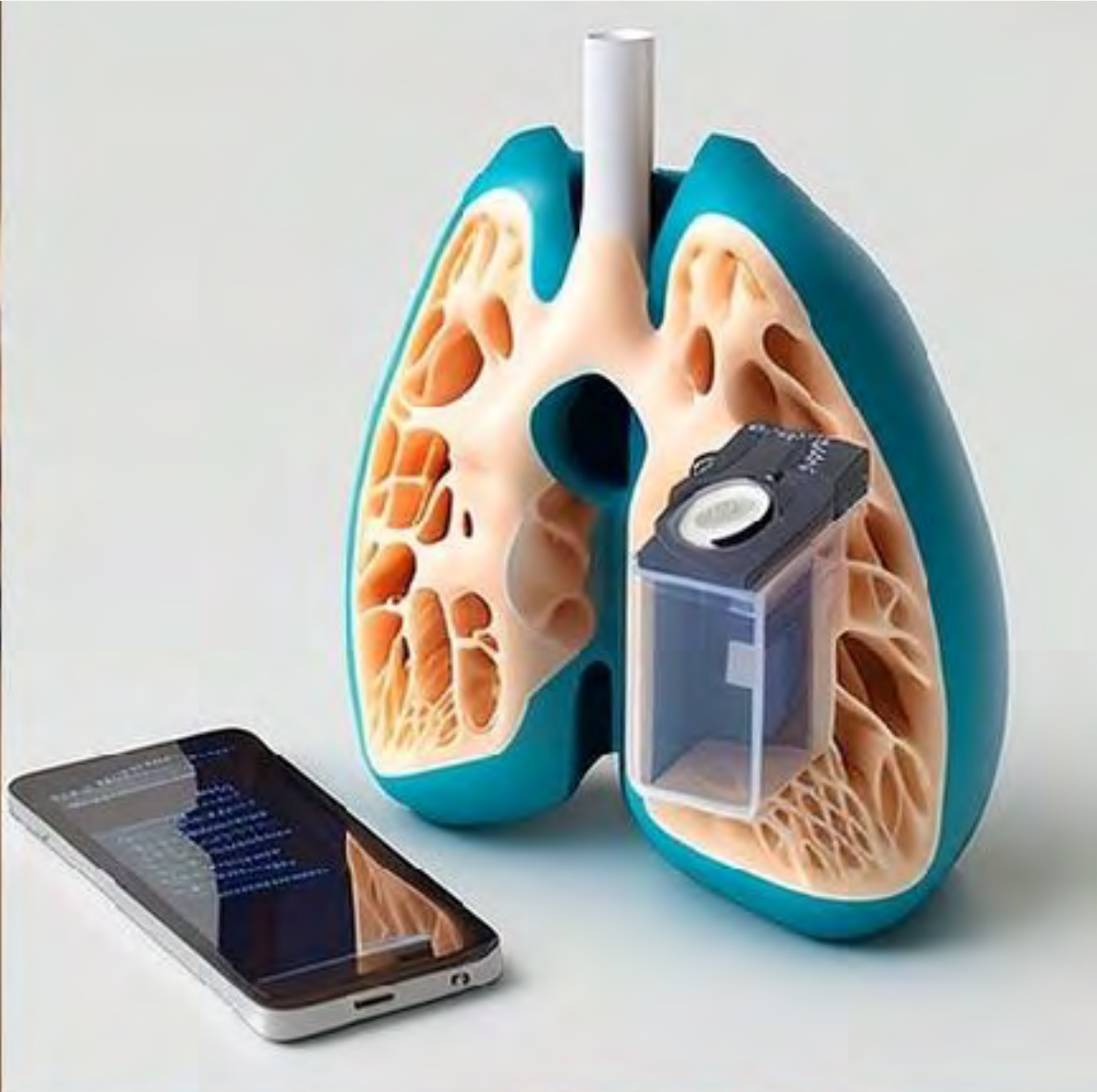
Apple continues exploring the potential of health monitoring tools.

By [Chase DiBenedetto](#) on November 2, 2023

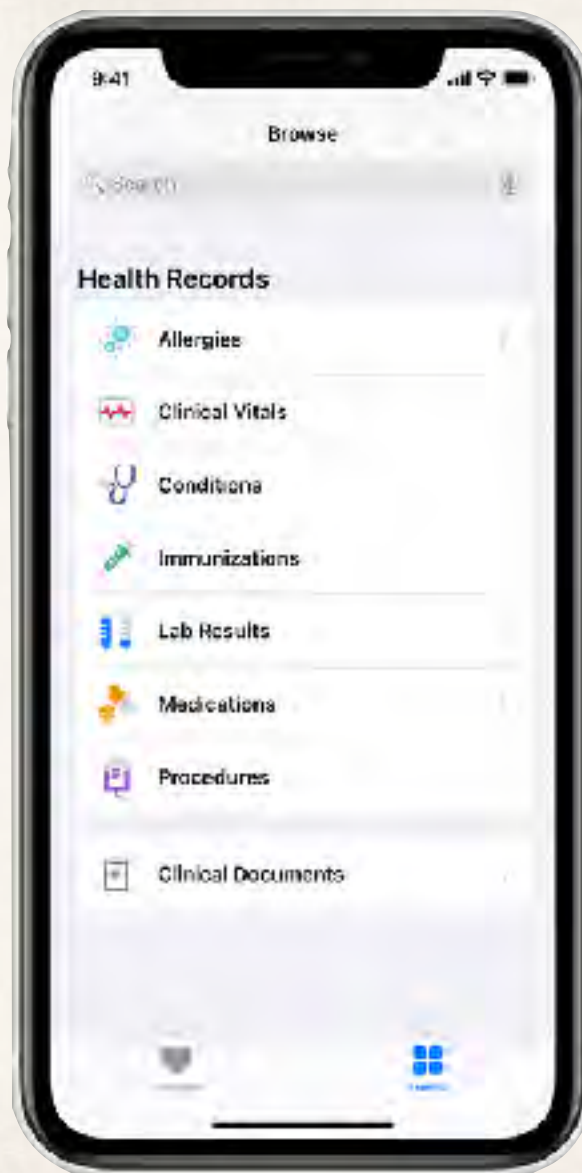






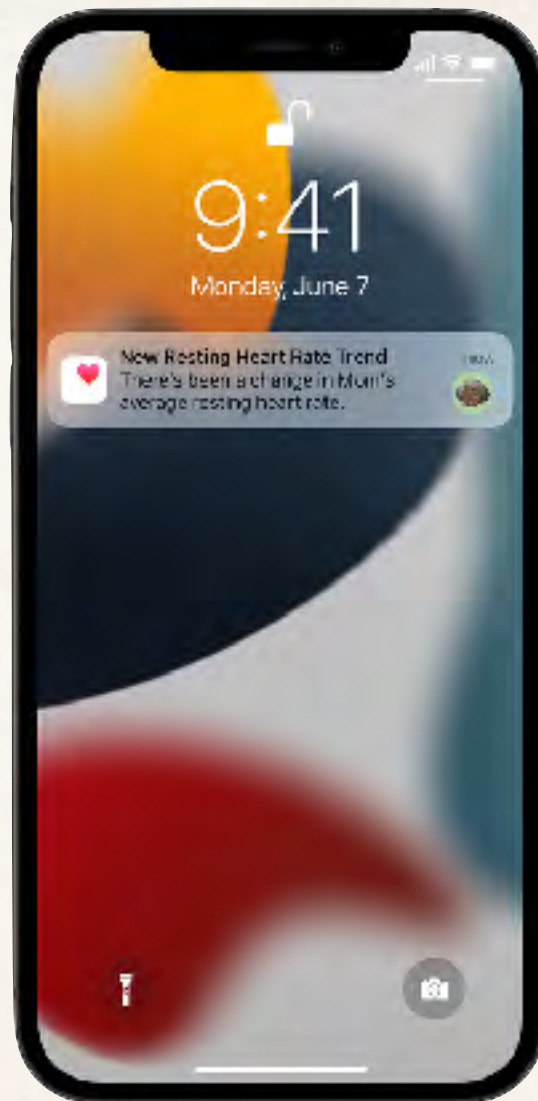
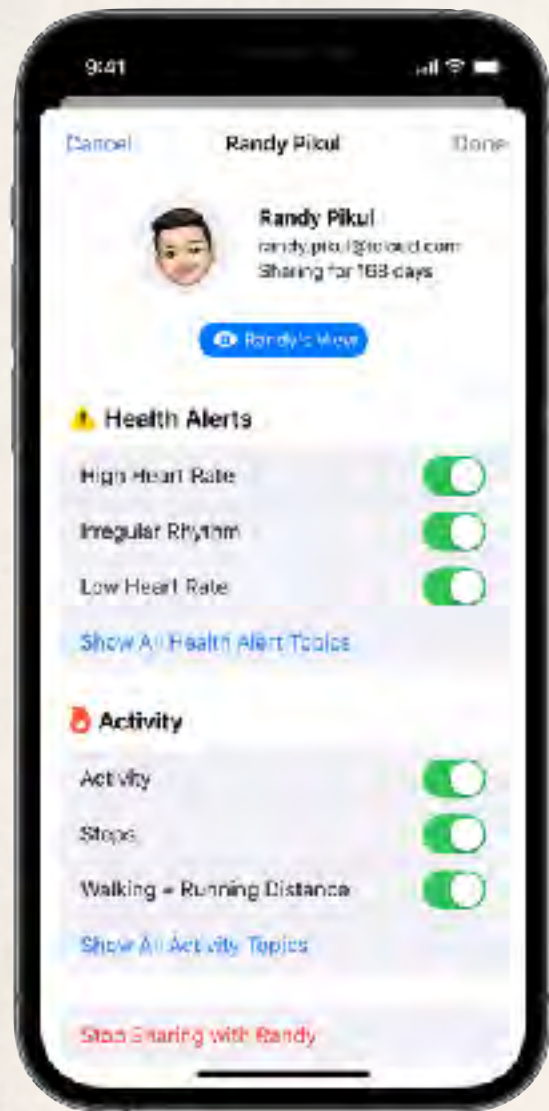


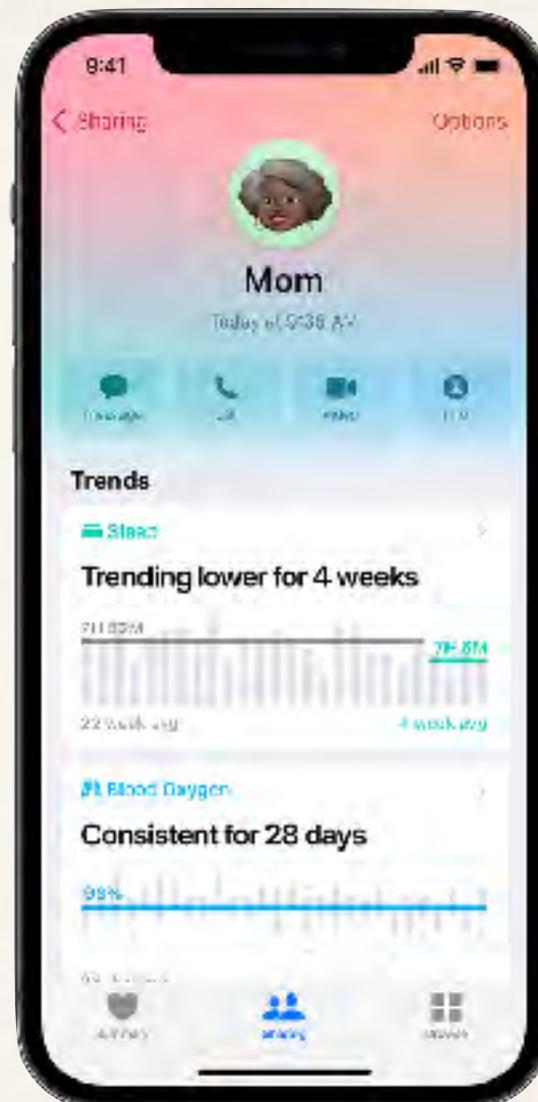
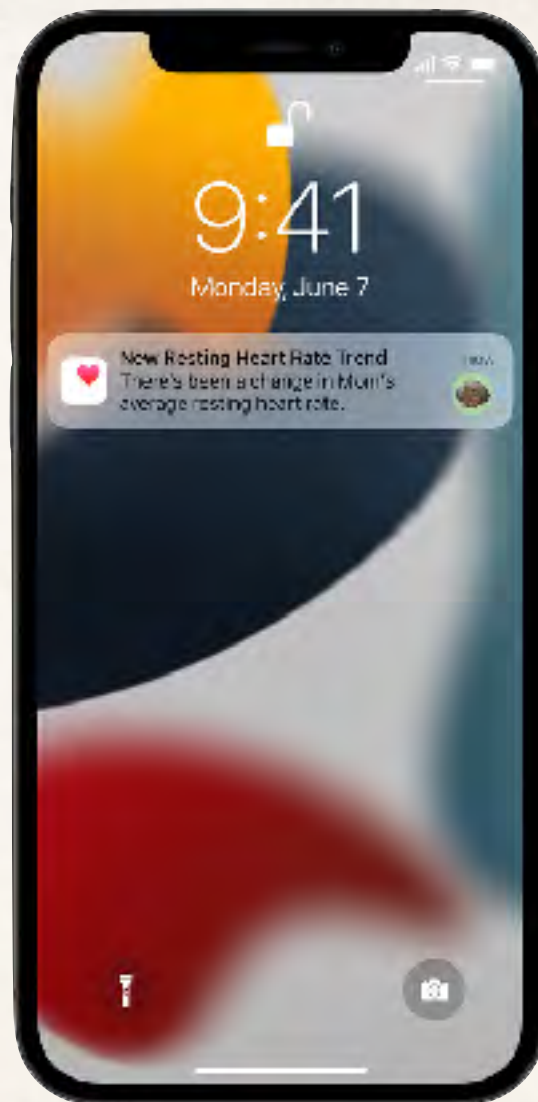




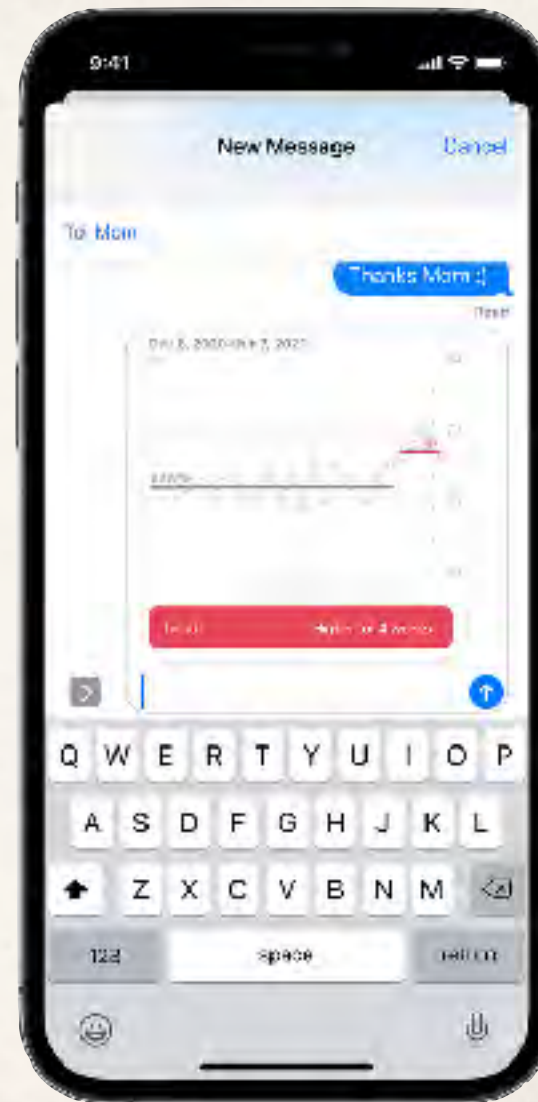
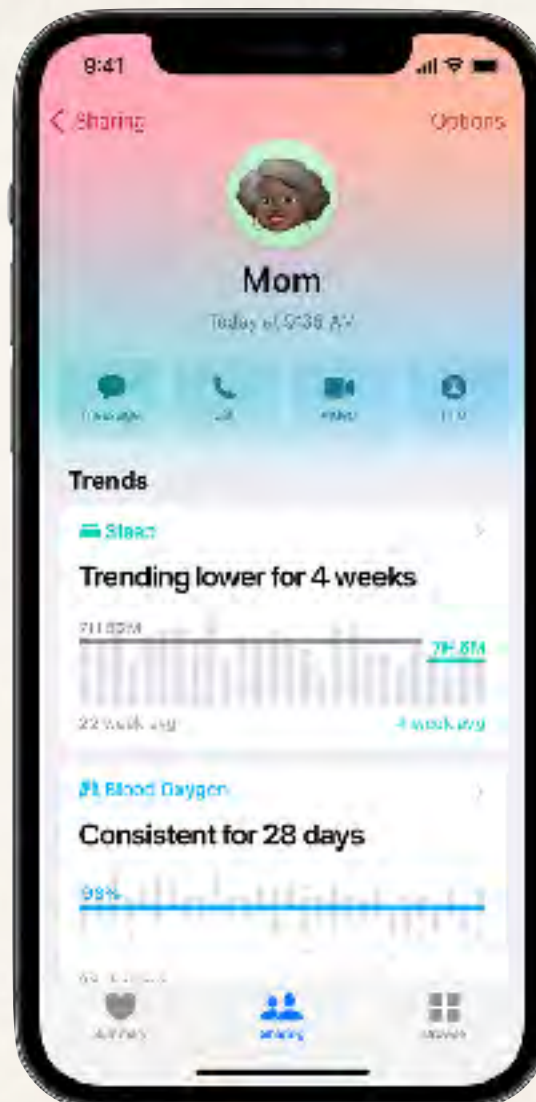
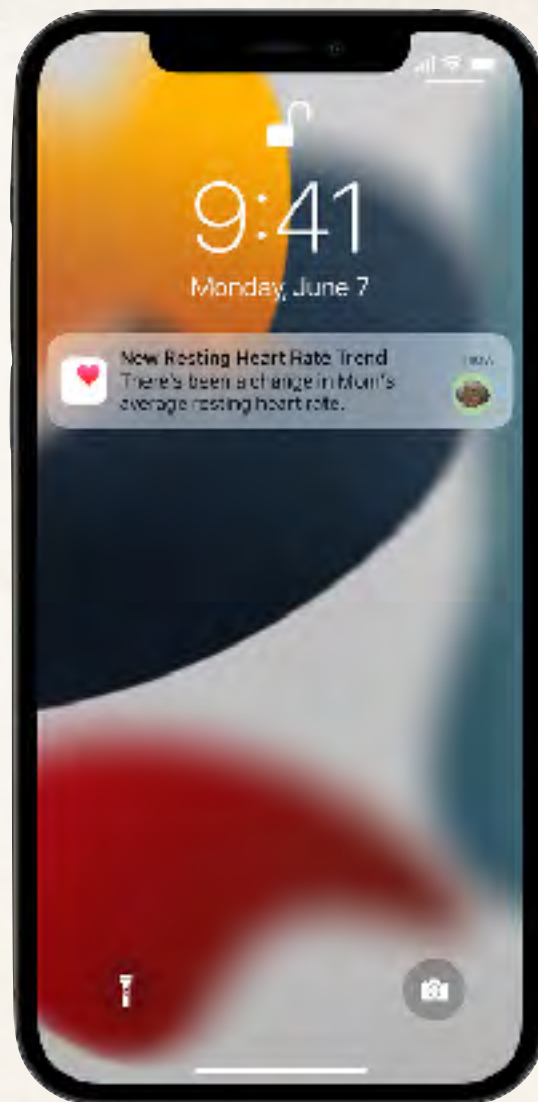












Everyone, everywhere always connected

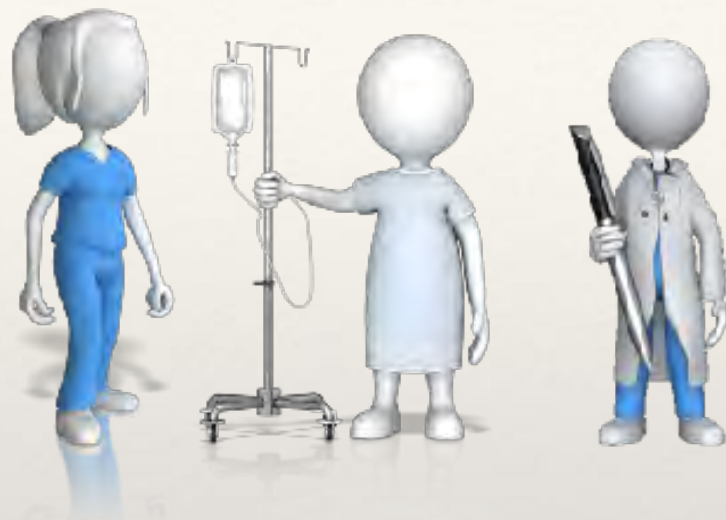




# Innovation shift



**För** patients



**With** patients



**By** patients

# Innovation shift



**För** patients



**With** patients



**By** patients

Patient journey





Institution journey



Patient journey



Professional journey



Institution journey



Patient journey



Professional journey



Institution journey



Patient journey



Journey of life




**Patients**  
Included

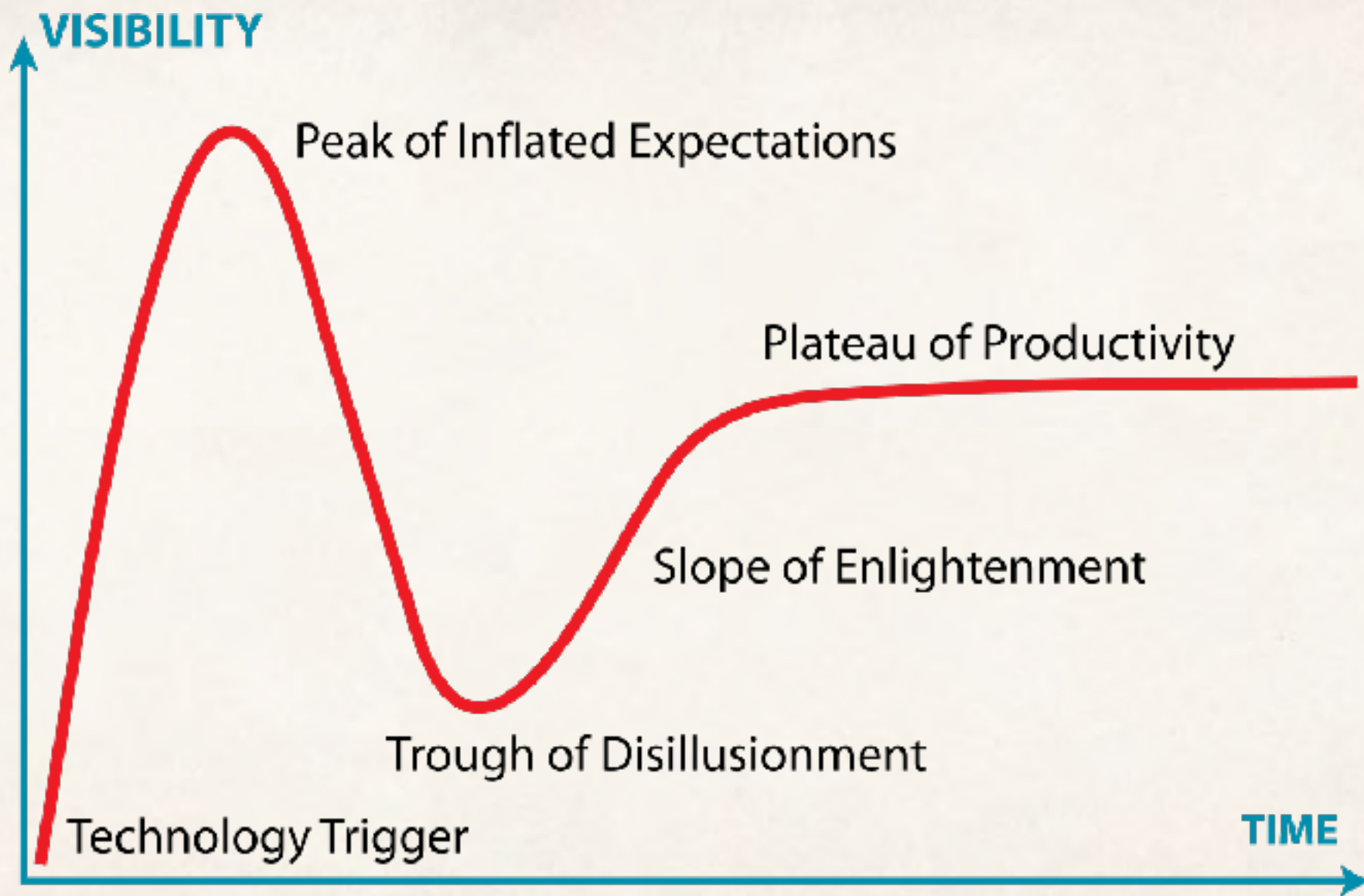
Incident

Incident



A circular graphic with a grid of blue dots. The grid is 5 dots wide and 5 dots high, totaling 25 dots. One dot in the top row, second from the left, is red. The text is centered within the circle.

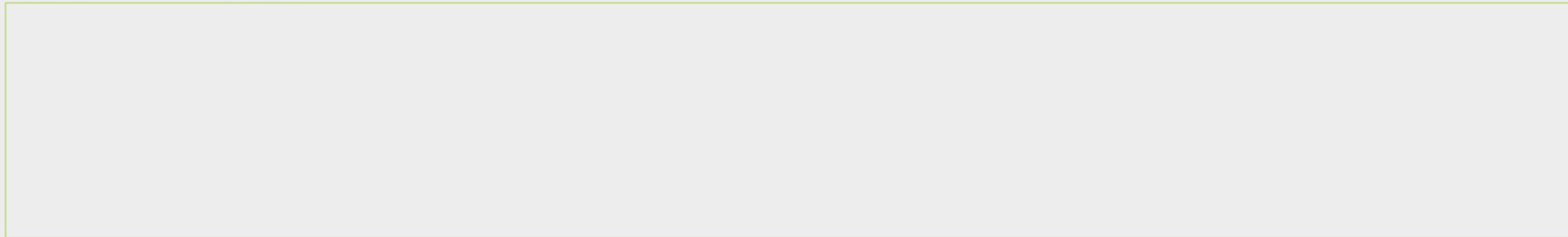
To manage her Parkinson's  
disease, Sara Riggare spends  
1 hour in neurological healthcare  
and 8,765 hours in selfcare per year.





Lucien Engelen  
Transform.Health

H MEETS R



Google

Radboudumc  
university medical center

Kruidvat

anwb



Ministerie van Volksgezondheid,  
Werk en Sport



Maastricht UMC+

Deloitte.

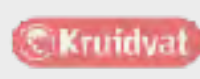
JUMBO







# Health(care) meets Retail



# Different locations present us with different opportunities

We have the possibility to test our experiences in various locations, each location might host different types of activities. What might be the main differences across these location (types)? How might these differences lead to different experiences?



## Vision for a design outlet experience

The location has a clear entrance, and is mostly visited by people who will spend the day. This provides us with the opportunity to design a clear end-to-end delightful shopping experience; which includes lots of walking, impulse purchases and lots of shopping. This is also an excellent location to test also with retail employers and their employees.

## Visitor characteristics

Visitors include day-trippers mainly from NL (30%), GER(50%) and BEL(18%), who spend an average of 6-8 hours per visit.



## Vision for a city center experience

This location includes a variety of retail opportunities, including shopping, restaurants and tourist attractions we might collaborate with.

We want to turn a conincidental visit into a moment of action by providing visitors not only with insights in their health, but enabeling them to take action immediately – through making full use of the nearby retail locations (e.g. sign up for a membership at a gym down the road).

## Visitor characteristics

Visitors include locals, tourists and a lareg amount of expats from the Eindhoven tech campus. Many of them are returning visitors.

**First priority**



## Vision for a city center experience

For suburban areas we want to design a mobile experience space (in a truck?) that can be moved to according to where it might be busiest, and tyherefor follow the movement of citizens, in their daily lives.

## Visitor characteristics

Visitors include locals, who live and work in the area, representing a cross section of the regional population.







# Together we build the Future of Health driven by Research & Edge building

In cocreation with partners, we research and build the Future of Health





# New opportunity?

REALTIME  
DATA



Access to care 6%

DNA Code  
20%

Post Code  
22%

Behaviour  
37%

Interactions of above  
- 15%



# New opportunity?

REALTIME  
DATA



Access to care 6%

DNA Code  
20%

Post Code  
22%

Behaviour  
37%

Interactions of above  
- 15%

# New opportunity?

REALTIME  
DATA



Access to care 6%

DNA Code  
20%

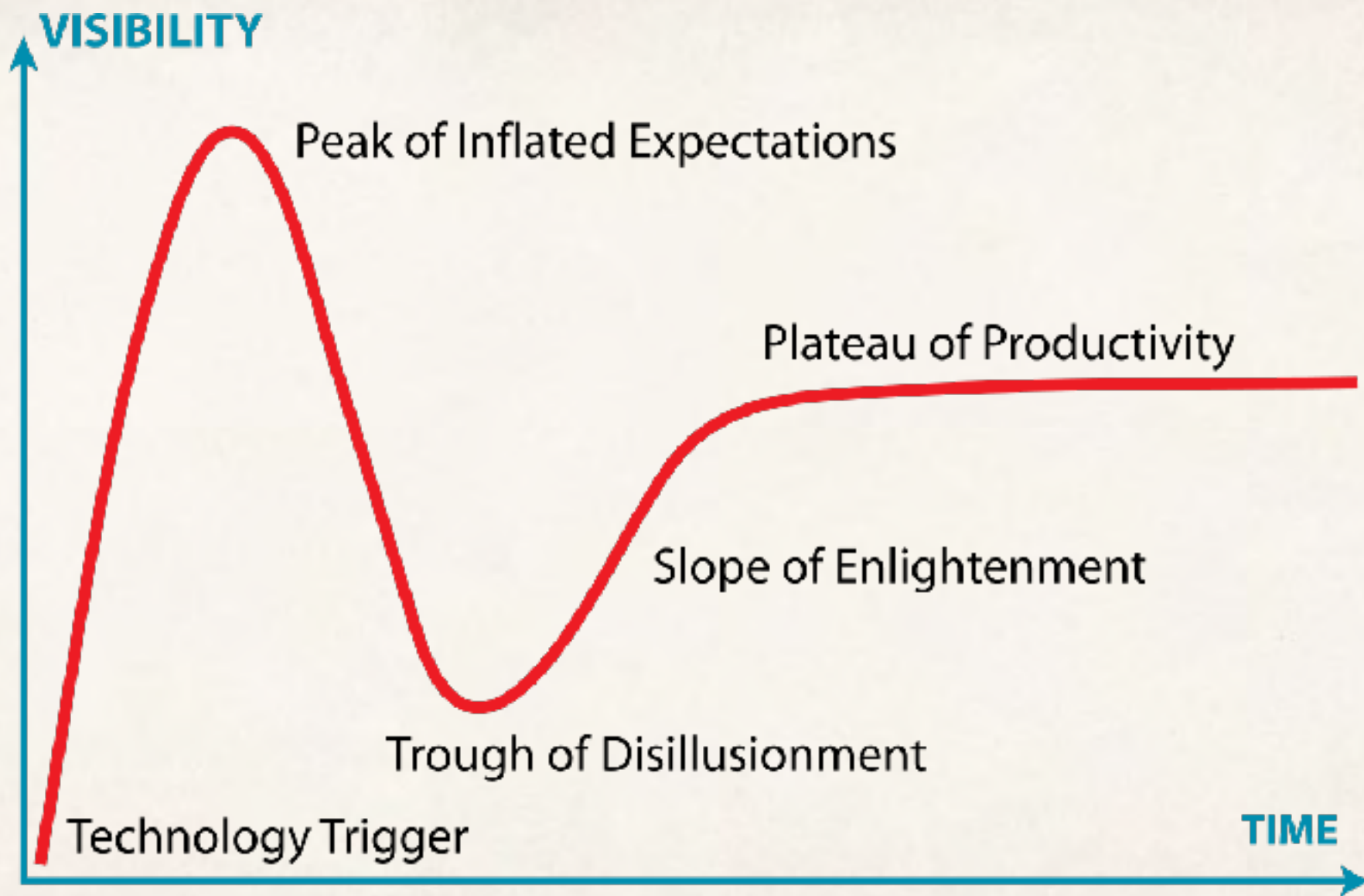
Post Code  
22%

Behaviour  
37%

Interactions of above  
- 15%

ANTAL	OMSCHRIJVING	WELLS	BONFAC
	WEL BONUS NR		548036
1	BRAND		1,00 E
	*STATHFELD		0,63
1	WEL BND PIZZA		1,08 E
1	BND PIZZA		2,00 E
2	GLORIX BLEK	1,06	2,73 E
1	POULIN KAK		0,38 E
1	WOLIN WIT		0,38 E
4	ALPAC	2,24	8,96 E
2	L'OR LUNDI	4,04	9,79 E
2	WETLE CHIPS	1,79	0,68 E
2	WEL WITHELEN	1,45	0,81 E
1 invag	WITHELEN	2,10/49	1,95 E
2	HUMMUS	2,59	5,13 E
1	SMERLWAFEL		1,43
1	WEL LAP SPEL		2,59 E
1	FRANS GROISS		0,64
1	TOBBI TIP		0,50 E
0,225kg	MAASLANDER		0,61 E
1	ZAKKE HEVE		1,59
1	WEL SANFRA		2,59 E
1	WEL AVOCADO		0,89 E
1,010kg	WITFRUIT	4,75/kg	4,85 E
30	SUNCTAM		47,79
BONUS	WEL BONDOLI		-0,48
BONUS	WETLE		-1,79
BONUS	HUMMUS		-2,59
BONUS	PIZZA		-1,04
BONUS	L'OR KOFFIE		-2,45
BONUS	WEL AVOCADO		-0,50
BONUS	ALPAC		-4,40
BONUS	WITFRUIT		-0,91
BONUS	KEGGER WORT		-1,45
BONUS	KAK		-0,00
BONUS	COURGETTE		-0,18
BONUS	WITTHELEN		0,38
BONUS	GLORIX		-1,35
BONUS	BRAND		-1,82
BONUS	LP BROOD		-2,64
WEL VOORDEEL			32,05
	WEL VOORDEEL		10,90

Different receipt  
Based on  
Personal profile  
activity & intake.















- full body scan
- heart health
- thyroid testing
- blood pressure
- weight management
- diabetes screening
- COVID-19 test
- HIV screening
- kidney
- liver health



- full body scan
- heart health
- thyroid testing
- blood pressure
- weight management
- diabetes screening
- COVID-19 test
- HIV screening
- kidney
- liver health





# RE-INVENTING RESTROOMS

FULL CONCEPT



MOBILE COMFORT HUB



SHOP IN SHOP



WELLBEING HUBS\*



\*under development







For \$99/year - \$66 extra family member






For \$99/year - \$66 extra family member



RxPass one flat fee of \$5 per month

A photograph of two men walking in a modern office hallway. The man on the left is bald, wearing a green button-down shirt, grey trousers, and a stethoscope around his neck. The man on the right is Black, wearing a white button-down shirt, brown trousers, and a backpack. They are walking towards the right. In the background, there is a large window on the left showing an outdoor patio with a closed umbrella, and a blue abstract painting on the wall.

**Accepts most health  
insurance plans**



[For Providers](#)

[Medications](#)

[Contact Doctor](#)

[Our Mission](#)

[Sign In](#)

[Sign Up](#)

# No middlemen. No price games. Huge drug savings.

**Imatinib**  
(Generic for Glivec)

**\$13.40**

Retail Price: \$2502.50

**Abiraterone Acetate**  
(Generic for Zytiga)

**\$33.50**

Retail Price: \$1093.20

**Invokana**  
(Canagliflozin)

**\$245.92**

Retail Price: \$675.14

**Mesalamine**  
(Generic for Canasa)

**\$28.70**

Retail Price: \$766.50

**Lisinopril**  
(Generic for Prinivil)

**\$5.60**

Retail Price: \$24.00

[See all medications](#)





BUSINESS // CHRIS TOMLINSON

## Texas billionaire Mark Cuban brings transparency and lower prices to prescription drugs

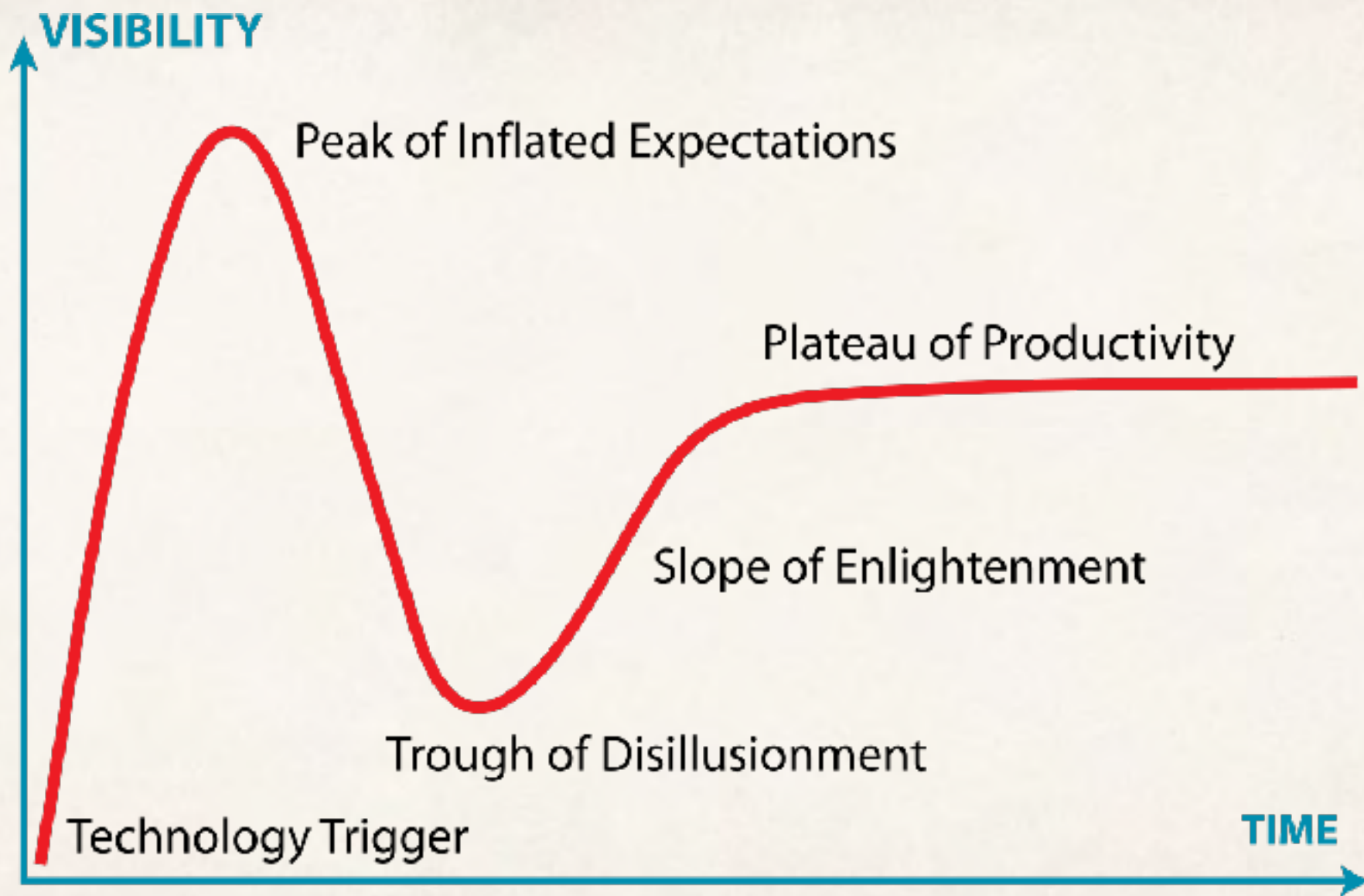
By **Chris Tomlinson**

Dec 8, 2023



## Device-dispenser

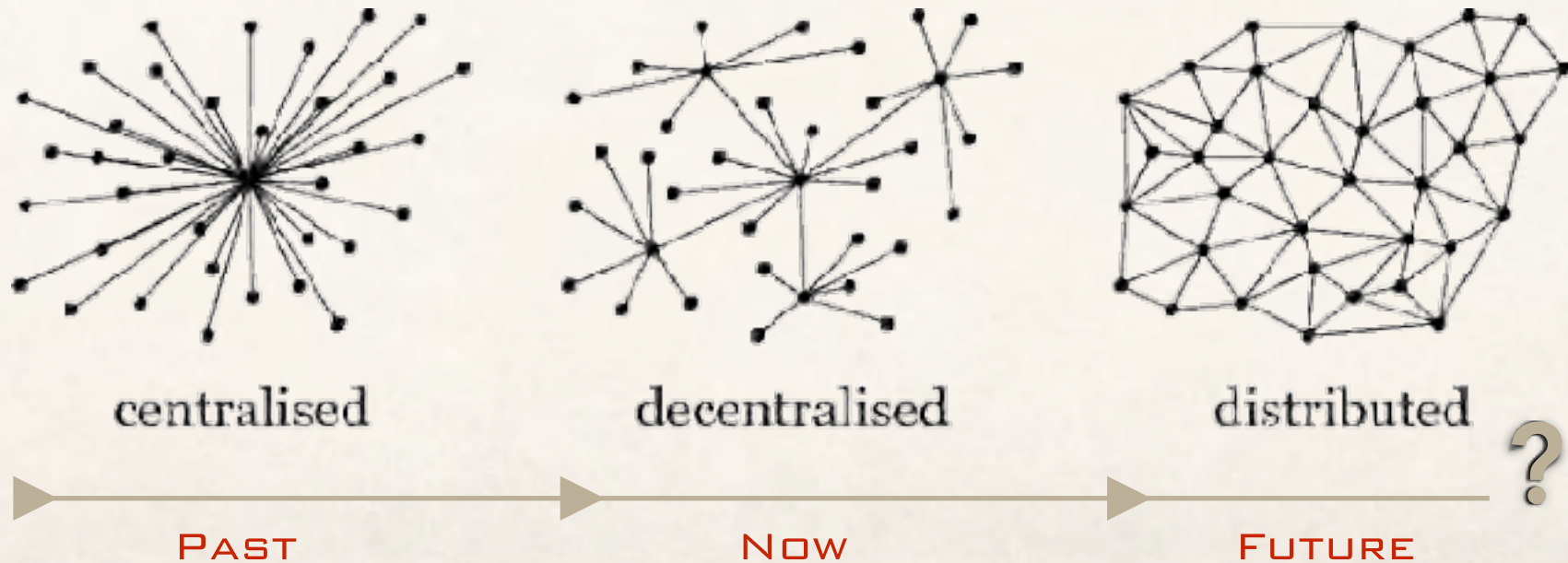






# CHANGE IN HEALTH(CARE)

FROM EXISTING SOLO-WORKERS INTO NEW NETWORK-WORKERS



# The delocalization of health(care)

# The delocalization of health(care)

- 70%



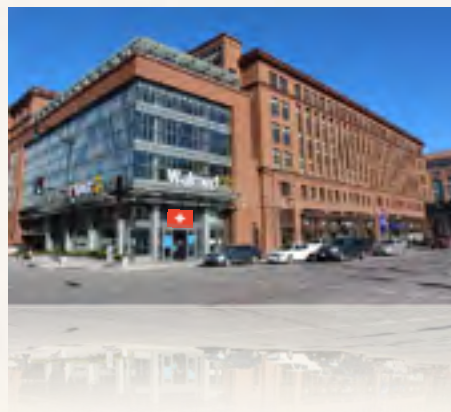




# from 'Hospital' to 'Home'



~~from 'Hospital' to 'Home'~~



from 'Hospital' to 'Phone'



# Healthcare will become a software branch.



# Healthcare will become a software branch.



**Healthcare will  
become a  
software branch.**





Healthcare will  
become a  
software branch.





has  
Healthcare ~~will~~  
become a  
software branch.





Mercy  Virtual









## 4CAST : 'remote' monitoring







11.000 telefoontjes ...



11.000 telefoontjes ...



Per dag

# ‘Nieuw’ Paradigma?

TELE  
MONITORING



TELE  
BEGELEIDING



TELE  
BEHANDELING



# ‘Nieuw’ Paradigma?

TELE  
MONITORING

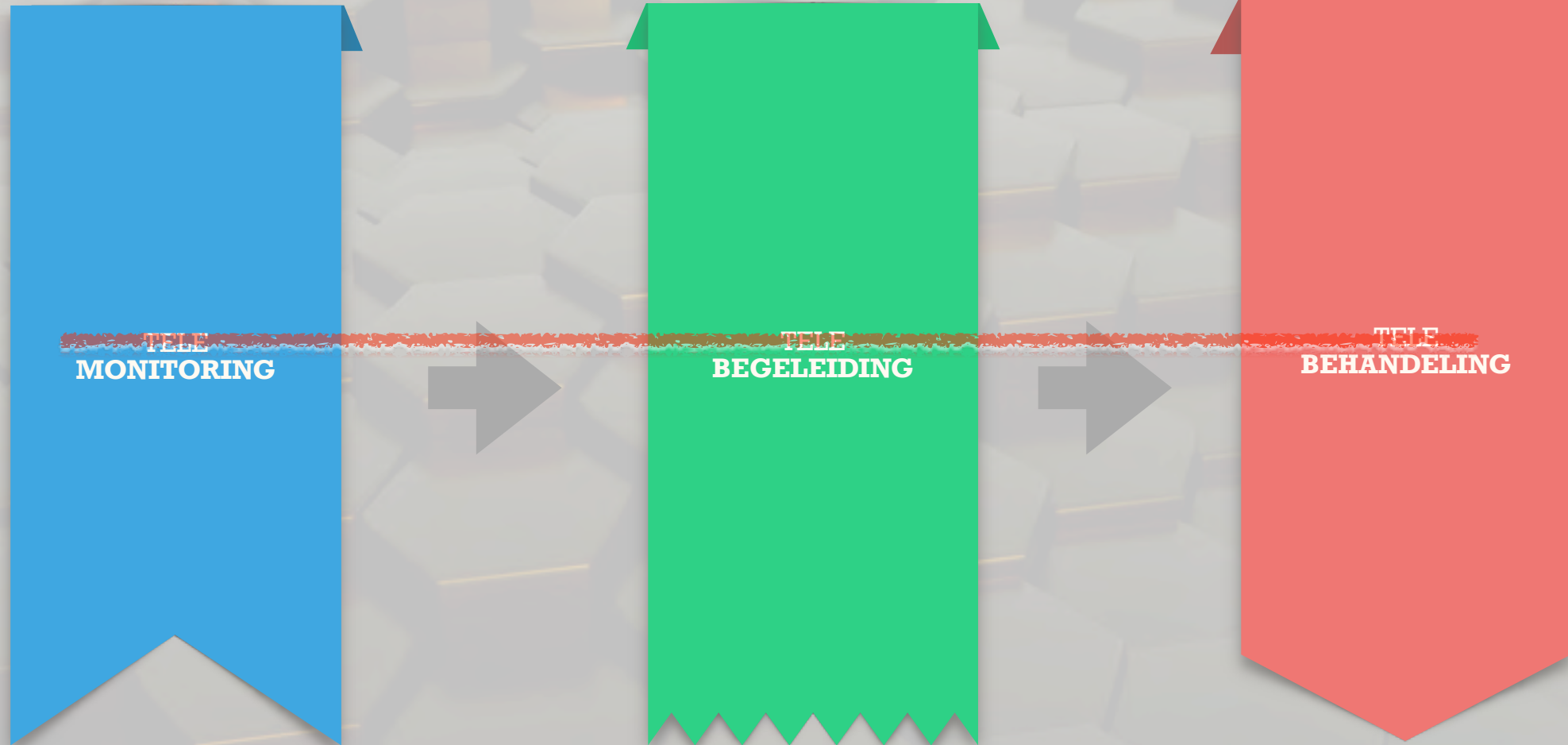


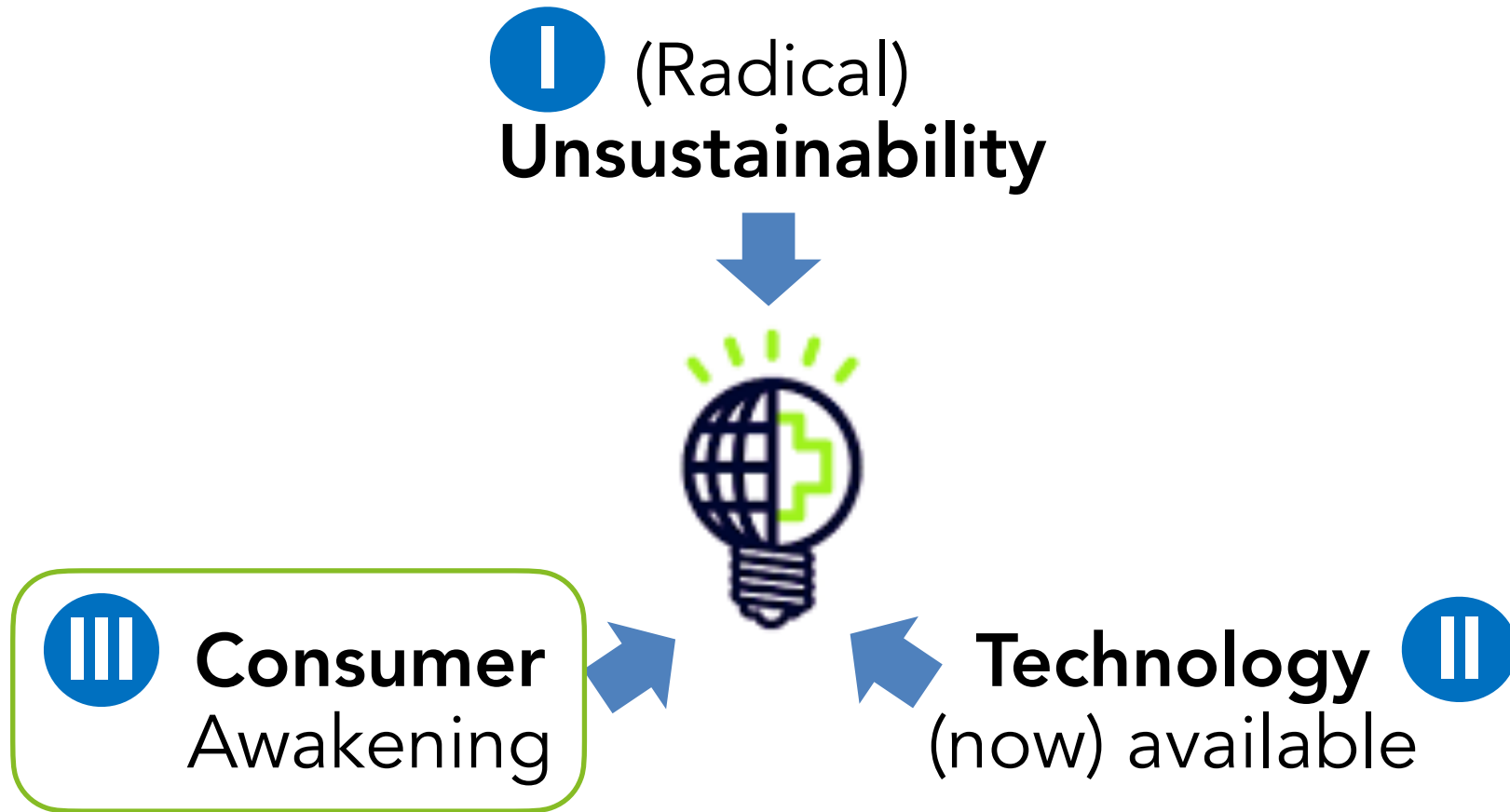
TELE  
BEGELEIDING



TELE  
BEHANDELING

# 'Nieuw' Paradigma?



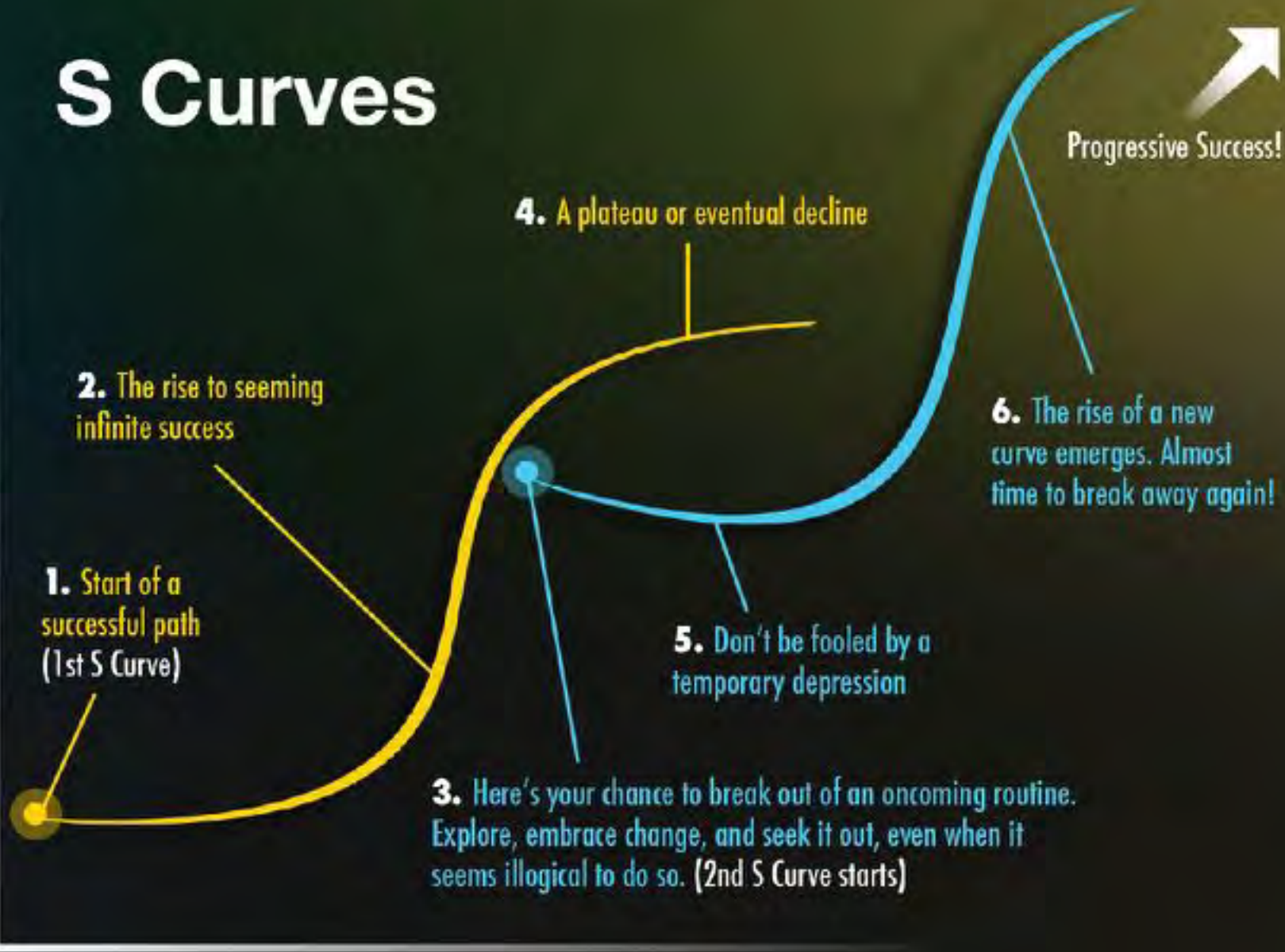


# The Innovation Imperative: 3 Forces



# S Curves

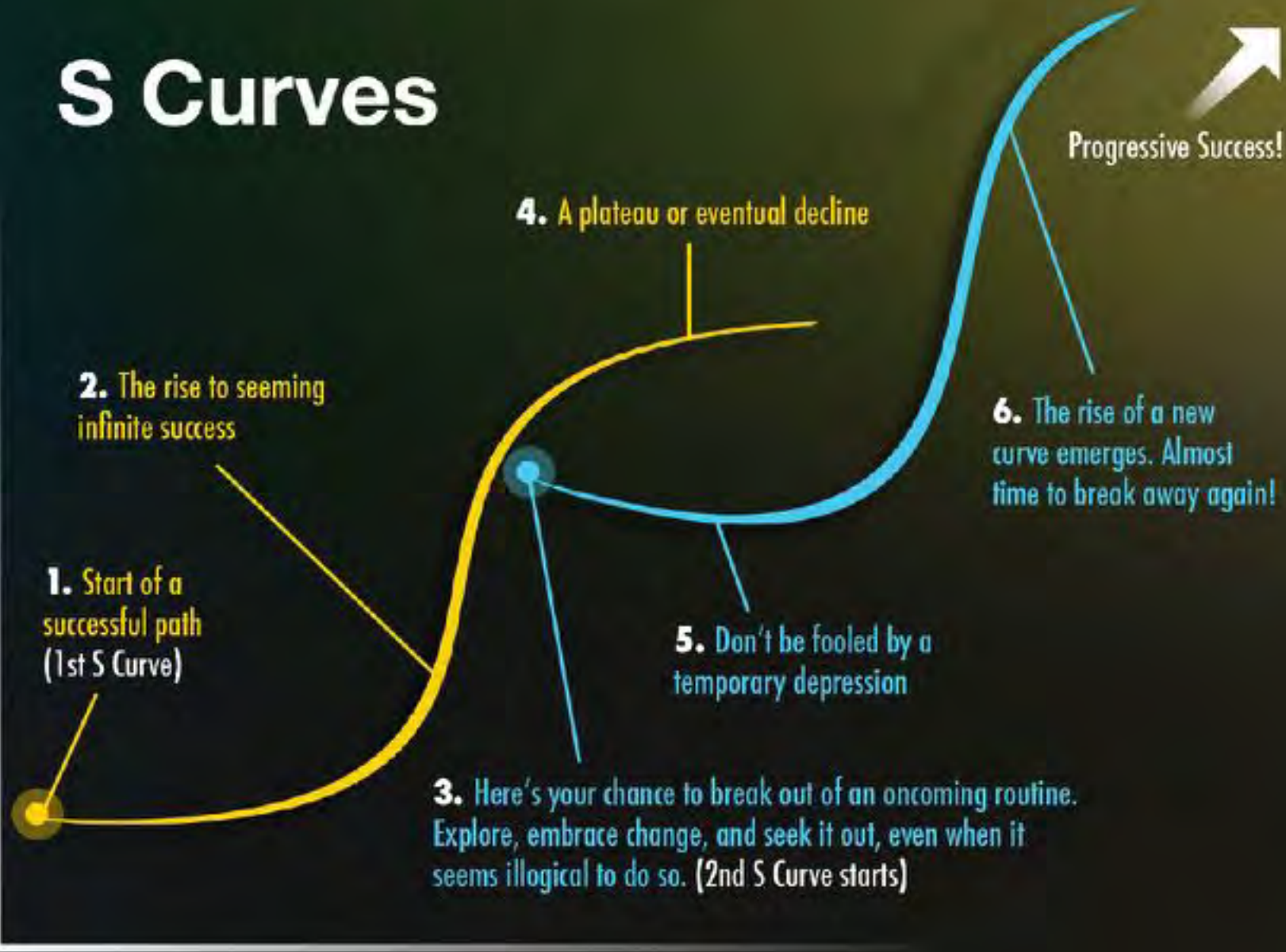
Progress



Time

# S Curves

Progress

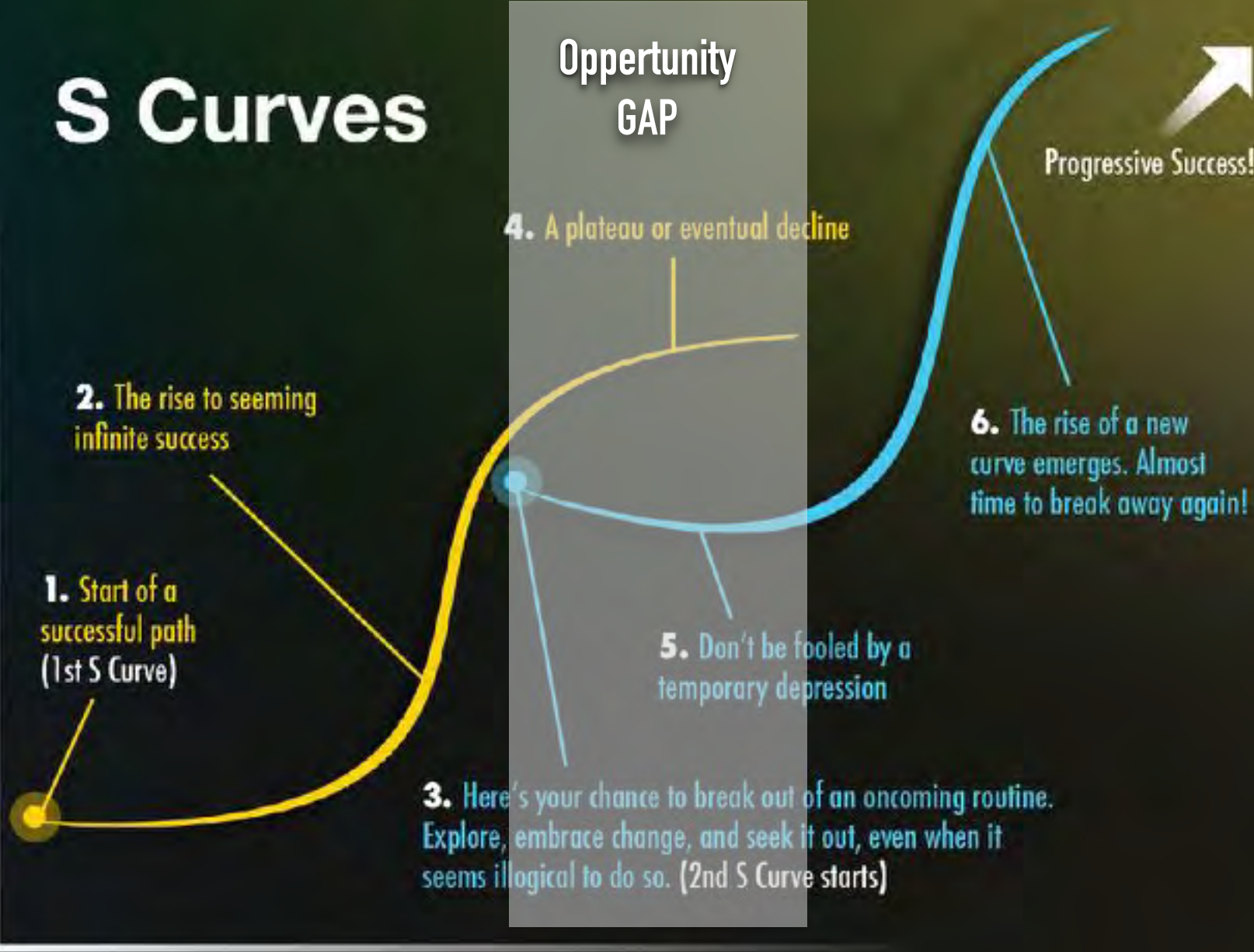


Time



# S Curves

Progress

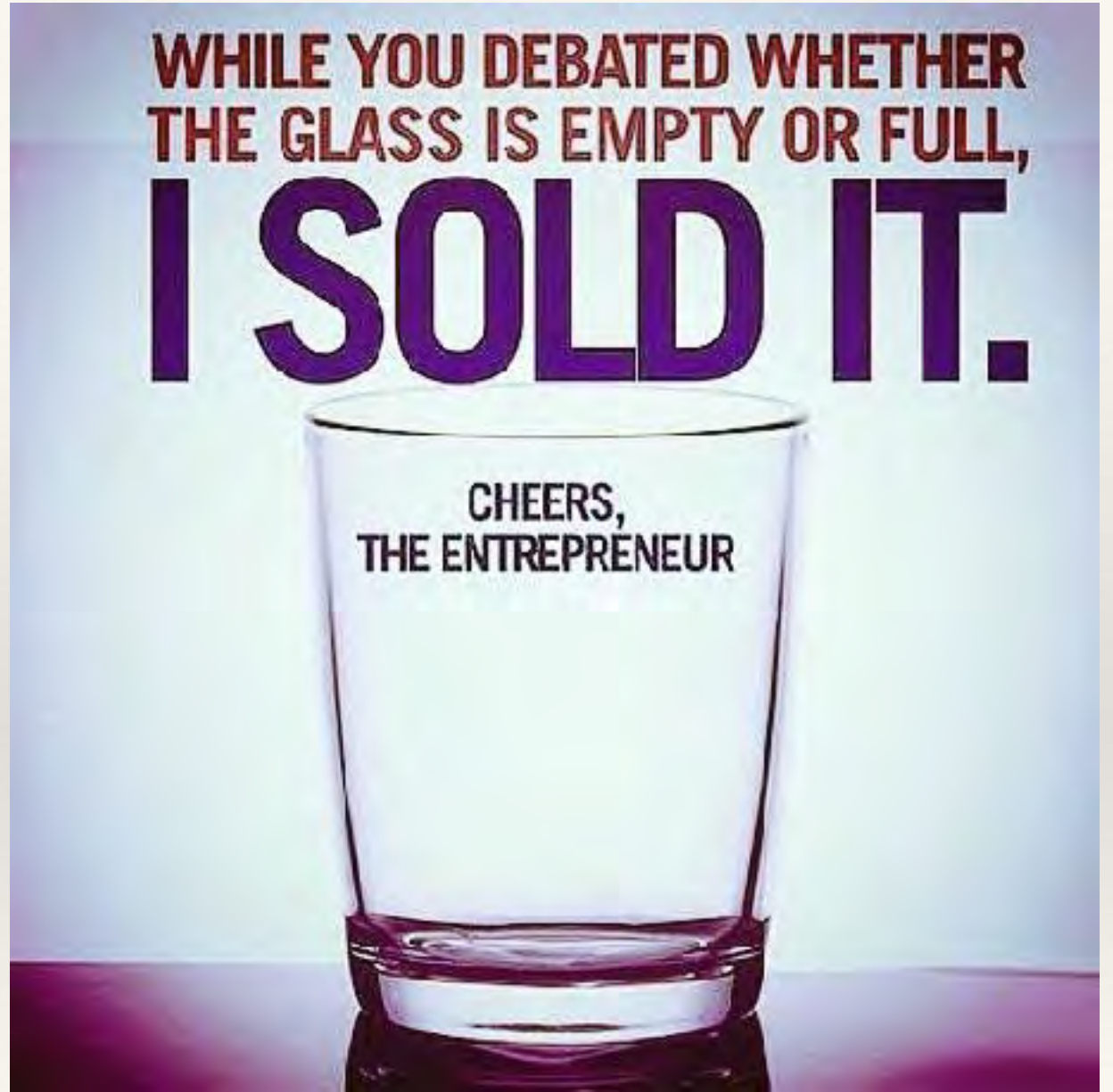


Time



WHILE YOU DEBATED WHETHER  
THE GLASS IS EMPTY OR FULL,  
**I SOLD IT.**

CHEERS,  
THE ENTREPRENEUR





WHILE YOU DEBATED WHETHER  
THE GLASS IS EMPTY OR FULL,  
**I SOLD IT.**

CHEERS,  
THE ENTREPRENEUR



# ICT&health World Conference

WHO, WHAT, WHERE

## ICT&health World Conference

- 14, 15 and 16 May 2024
- 08.<sup>th</sup> a.m. to 06.<sup>th</sup> p.m.
- Physical + Live stream
- 1st, 2nd, 3rd and 4th line of care
- 10.000+ national and international visitors



14/15/16  
May 2024



Time  
08.<sup>th</sup> a.m./06.<sup>th</sup> p.m.



Visitors  
10.000+



MECC Maastricht  
The Netherlands

Hosting  
City



Genesite Maastricht

Hosting  
Province

province limburg



## Target group 2024

From home and abroad

### 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> line Stakeholders in healthcare

- Government
- Policymakers
- Supervisory boards of hospitals and clinics
- Heads of purchasing finance/investments/IT
- Media
- Healthcare professionals
- Experience experts
- Research and knowledge institutions
- Patients
- Caregivers

### Businesses

- Technology companies
- Startups and Scaleups
- Developers
- Financial service providers
- Insurance companies
- Consultants/consultancy firms
- Investment companies

### Knowledge organisations

- Healthcare authorities in the Netherlands
- Universities & living labs
- Patient organizations

### Ministries present

Ministry of Health Welfare  
and Sports (VWS)

ICT&health  
World  
Conference





**Maria Henneman**

Conference Host  
ICT&health



**Conny Helder**

Minister  
Ministry of Health, Welfare and Sport



**Micky Adriaansens**

Minister  
Ministry of Economic Affairs, Clinical Policy



**Björn Zöega**

CEO  
Karolinska University Hospital



**John D. Halamka**

President  
Mayo Clinic Platform



**Marc Noppen**

CEO  
UZ Brussel



**Safaa Almajthoub**

CSO at SEHA Virtual Hospital  
Ministry of Health KSA



**Katie Baca-Motes**

Co-founder and CSO  
Scipps Research



**Maurice van den Bosch**  
Chairman Executive Board | DLVG



**Diederik Gommers**  
Chief Intensive Care/Intensivist,  
Erasmus MC | Chair editorial board  
ICT&health



**CK Andrade**  
Director, Health care - Life Sciences  
Gartner



**Michel van Genderen**  
Internist-Intensivist  
Erasmus MC



**Masl Mohammadi**  
Scientific Director  
The DELL Academy



**Lucien Engelen**  
CEO  
Transform Health



**Daan Dohmen**  
Professor Digital Transformation  
in Healthcare



**Katarzyna Kolasa**  
Professor of Health Economics  
Kozminski University (Poland)





**Bianca Rouwenhorst**

Director of Information Policy/CIO  
Ministry of Health, Welfare and Sport



**Wim van Harten**

Chairman Executive Board  
Rijnstate Hospital



**Teun Toebes**

Pioneer for Human-Centered Care



**Helen Mertens**

CEO  
Maastricht UMC+



**Aashima Gupta**

Global Director, Healthcare Strategy  
and Solutions  
Google



**Soon to be announced**

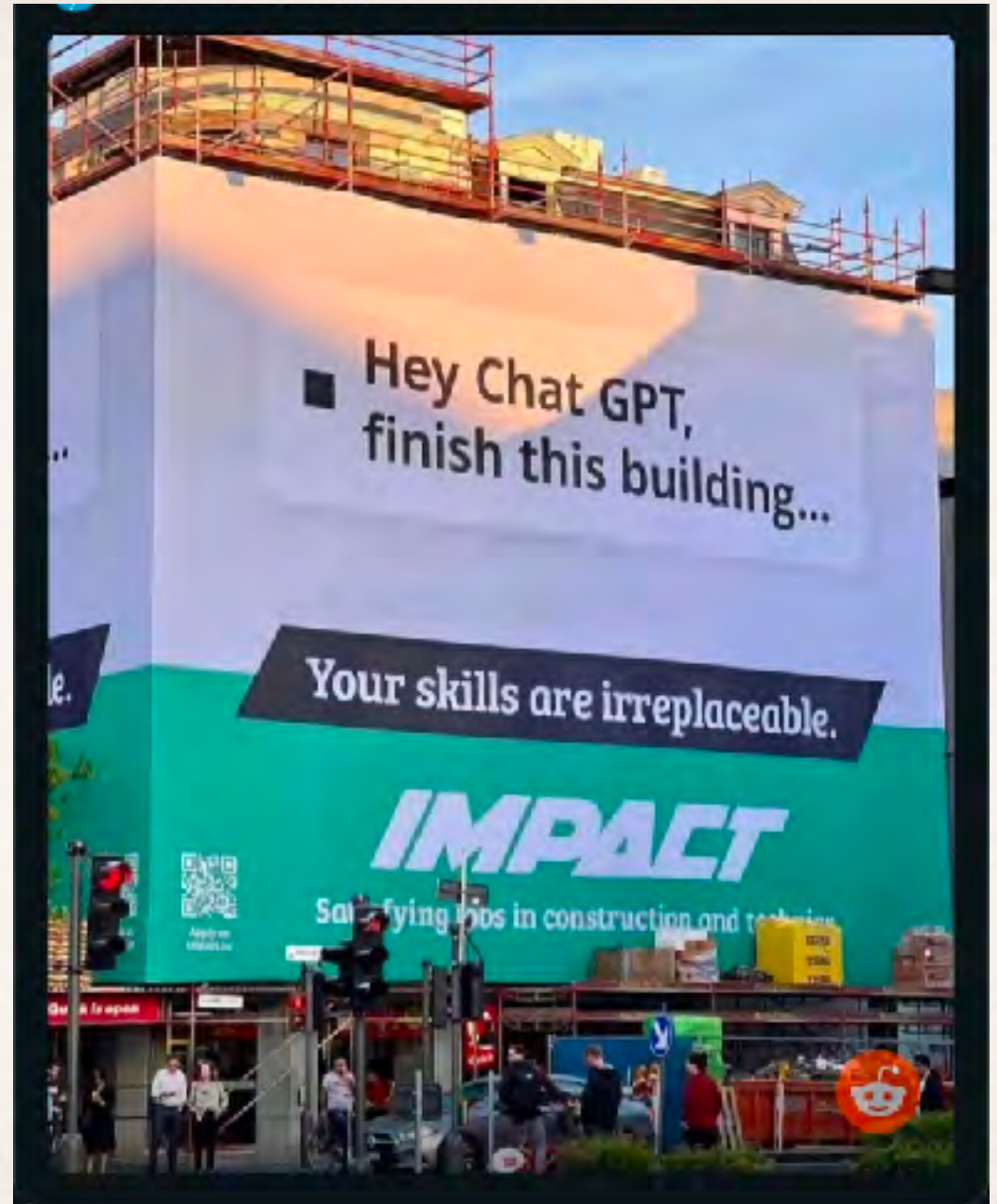


**Soon to be announced**



**Soon to be announced**













**LET'S CLOSE THE TAP NOW!**



A close-up photograph showing a healthcare worker in blue scrubs holding the hand of an elderly patient lying in a hospital bed. The worker's hand is gently placed over the patient's hand, which has pink nail polish. A stethoscope is visible around the worker's neck. The background is softly blurred, showing the white linens of the bed.

**the Power of the human touch**

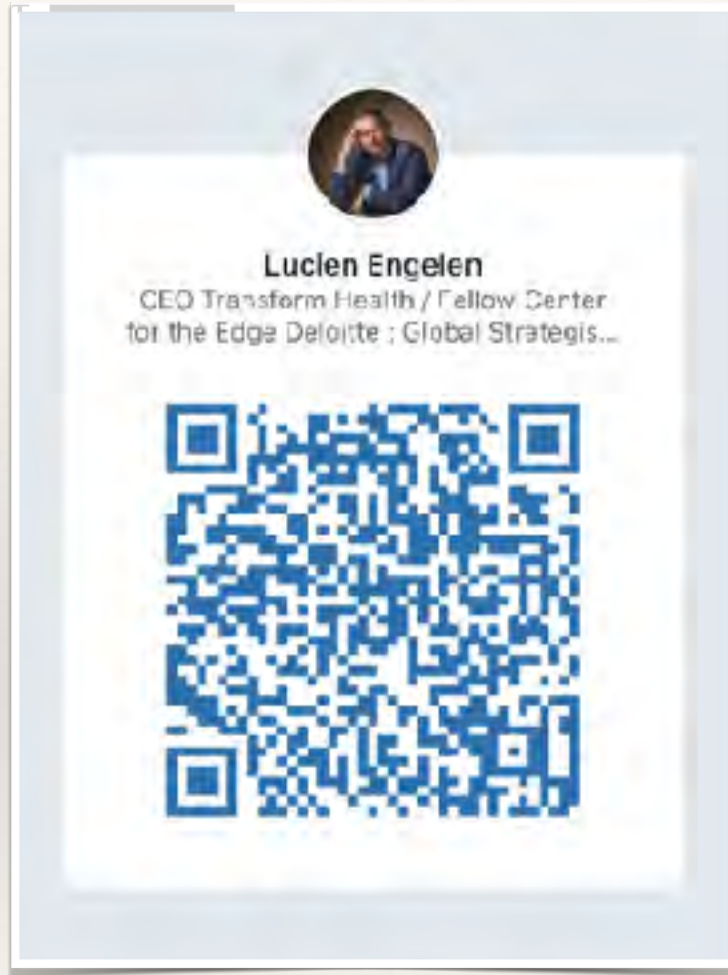


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