How to Boost Innovation

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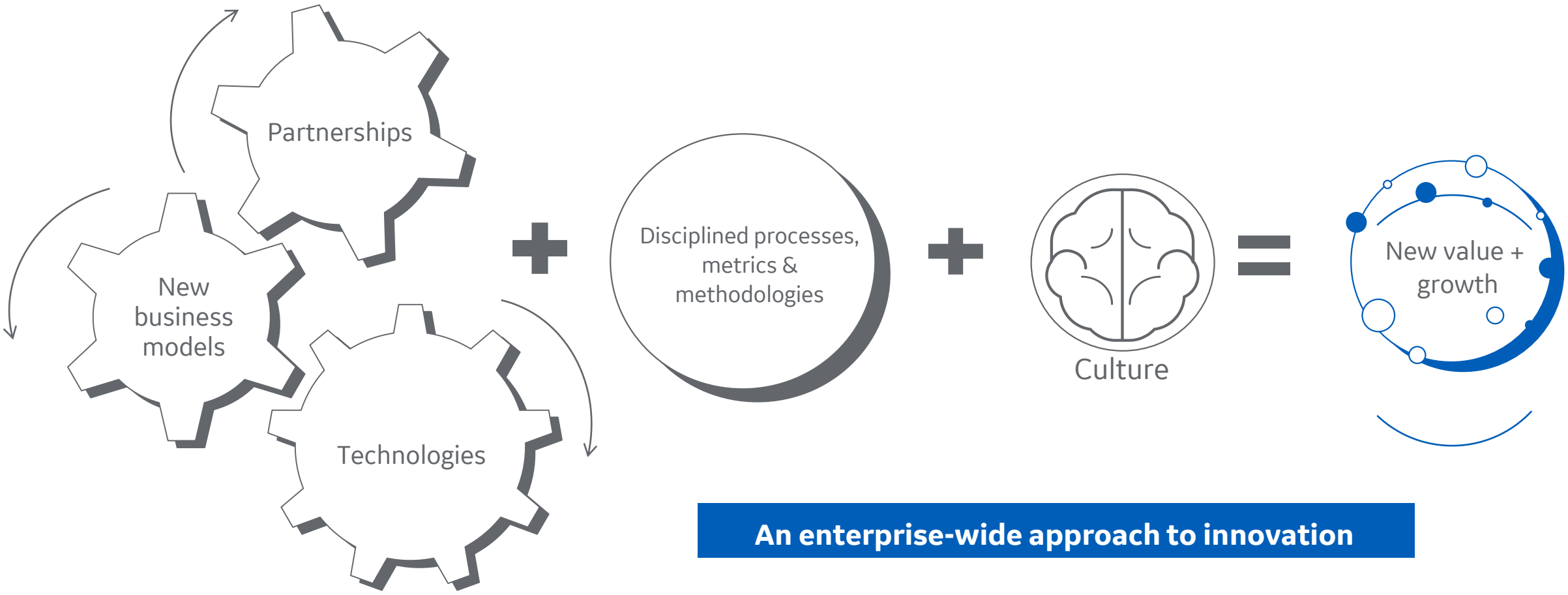
GE Healthcare

Our session today

- Technical, business model and partnership innovations
- GE Healthcare's approach to innovation
- Why are some innovations unsuccessful?
- Innovation challenges... group discussion

Industrializing the innovation process



An enterprise-wide approach to innovation

Technical, business model and partnership innovations

COMMAND CENTERS

Patient impact

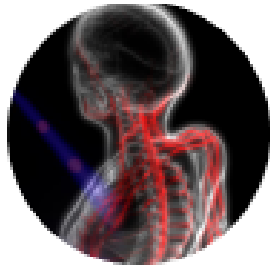
...on 24/7

25% ↓ ER wait time

60% ↓ care setting transfers

70% ↓ OR transfer delays

BIOELECTRIC MEDICINE



Market disruption

Using energy to stimulate nervous system

Ultrasound replacing drugs to treat chronic disease

Non-invasive alternative to traditional medicine

KUBIO

Creating capacity

50% ↓ Capex and build time

Faster time-to-market

Greater optionality

PARTNERSHIPS

Healthcare transformation

✓ Teaming with the best

Clinical: Stanford, MSK, Erasmus, Partners...

Tech: Nvidia, AWS, Microsoft...

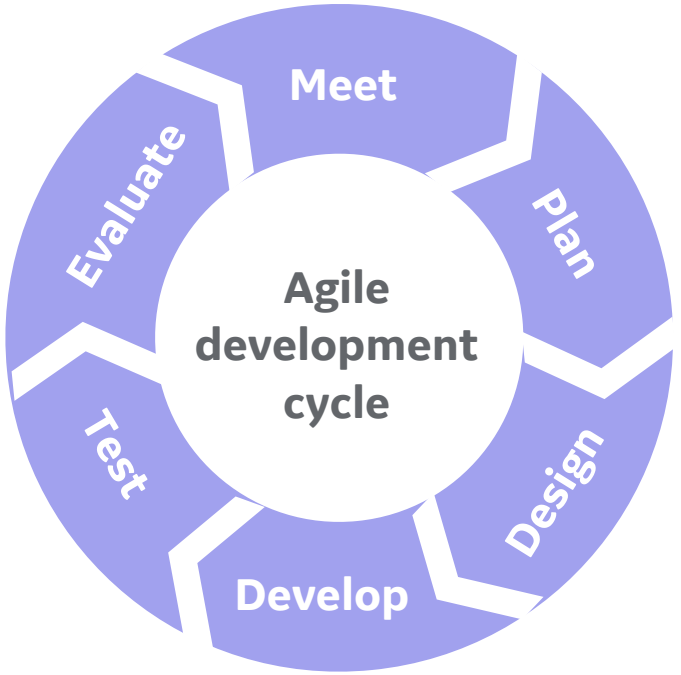
Pharma: Roche, Pfizer, Stryker...

Fostering a culture of innovation

FastWorks

- Growth Boards for funding optimization
- Speed to learning & stopping
- Accelerating customer validated outcomes
- NPI & process focus … 200+ projects

Digital



- Agile approach to software development
- Adaptive planning, evolutionary dev., early delivery, continual improvement
- Sprints to develop prototype, testing to enable fast decision making

Additive capabilities = manufacturing innovation

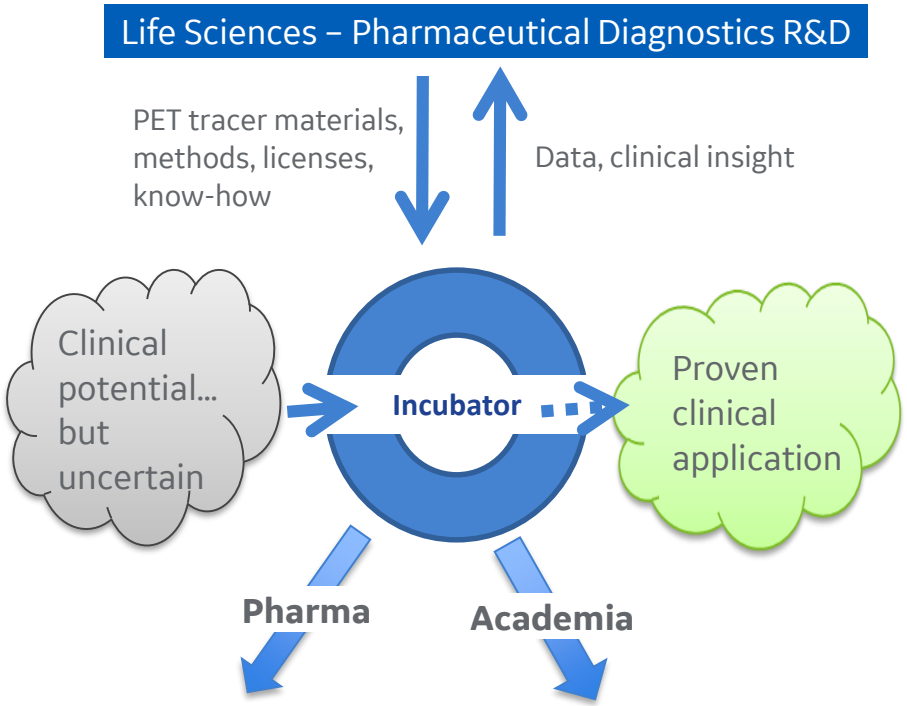
- ✓ Speed, quality, reliability
- ✓ Applicable across entre business
- ✓ Efficiency for customers and GE Healthcare
- ✓ De-risks supply chain
- ✓ Lighter, fewer components
- ✓ Clinical applications


3D printed heart


3D printed liver

Mix of innovation channels…

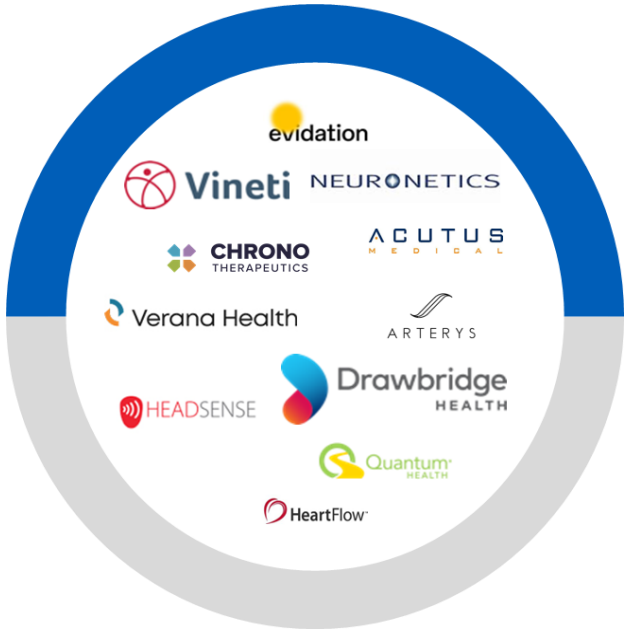
Research Circles



Collaborative groups accelerate qualification for therapeutic drug development

Research community can access research tools early to explore multiple applications

Minority investments



- Successful investments with Ventures
- Connected to business strategy
- Opens potential new markets
- Not every bet works out…

Small bets and bolt-on acquisitions

- Vision: W2W manufacturing
- Highly focused BD activity
- Controlled, targeted bolt-ons
- In line with Cell Therapy vision

Learnings from unsuccessful innovations…

• **Great technology innovation**…	business model didn't adapt
• **Perfect engineering solution**…	little customer demand and suitability
• **Internal bureaucracy**…	too slow to innovate and missed opportunity
• **Good product at right price**…	distribution and dealer network not established
• **Excellent product design**…	supply chain cost = overpriced product cost

Discussion

What would it take to unlock exponential innovation?

What barriers could be removed to get innovation faster to market?

How should we be investing in AI and machine learning to support radiography? Is this fast enough?

How do you best use technology to lower the cost of healthcare?

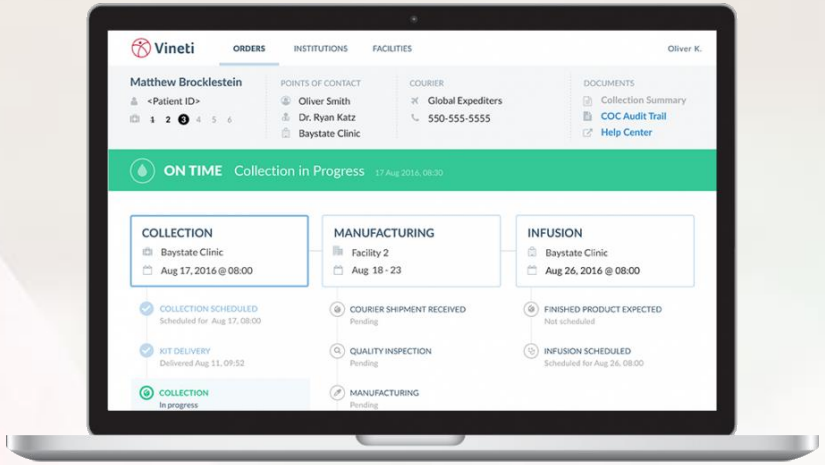
Which technologies, nascent or established, will most help create access for the 5.8 billion who are underserved today?

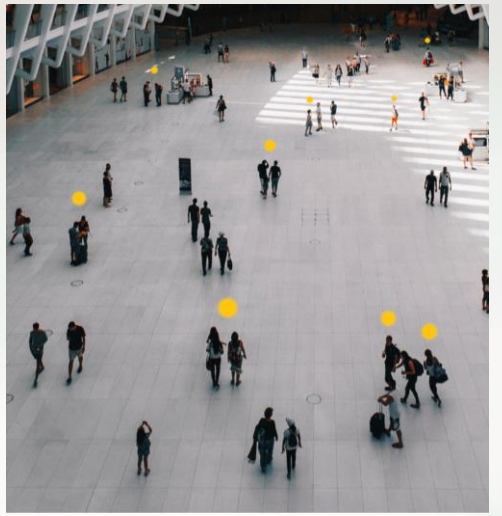
If you had $1B to invest in technology – where would you invest it, and why?

Appendix

BUSINESS CREATION

Creating new companies for future growth





Drawbridge HEALTH

Enabling personal diagnostic testing, anytime and anywhere.

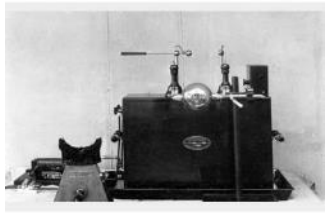
Vineti

Smart therapy. Connected.

evidation

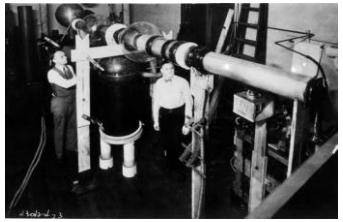
Quantifying health outcomes using data from patient-consumers.

A 100+ year legacy of leadership in innovation



1896
General Electric produces the forerunner of today's medical X-ray systems

1908
GE research scientist William Coolidge patents the X-ray tube



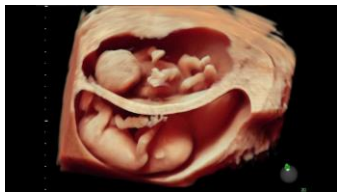
1930
GE installs the most powerful x-ray system in the world in New York

1960s
First 500-cycle, battery-powered mobile x-ray generator

1970s
The world's first "rotate only" Computed Tomography (CT)

1982
The world's first commercial high-field MR system

2000
The first to combine the power of PET and CT in a single system



2003
The world's first 4D fetal ultrasound system

2003
Acquisition of Amersham PLC and its leading Life Sciences portfolio

2010
The world's first pocket-sized ultrasound device

2012
The world's first modular biopharmaceutical factory

2015
First SilentScan technology

2016
First hospital Command Center goes live at Johns Hopkins

2017
World's first mammography system that puts women in control

2018
The world's first ultrasound optimized for AI