

1980's Flock of
Seagulls Hair

"Don't you ever
shave?"

— Charles Plath Sr.



The Danger of a Single Future

Charles Plath, Senior Director,
Design & Research
CCC Intelligent Solutions



Title inspired by the TED Talk "The Danger of a
Single Story" by Chimamanda Ngozi Adichie



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How I got here



Brian David Johnson

Futurist in Residence
at ASU, DoD, Founded
Threatcasting, U.S.
Army



Robin Champ

DoD, Secret Service,
Harvard, LBL
Strategies



Dr. Lauren Keeler

Professor of Futures
and Sustainability at
ASU

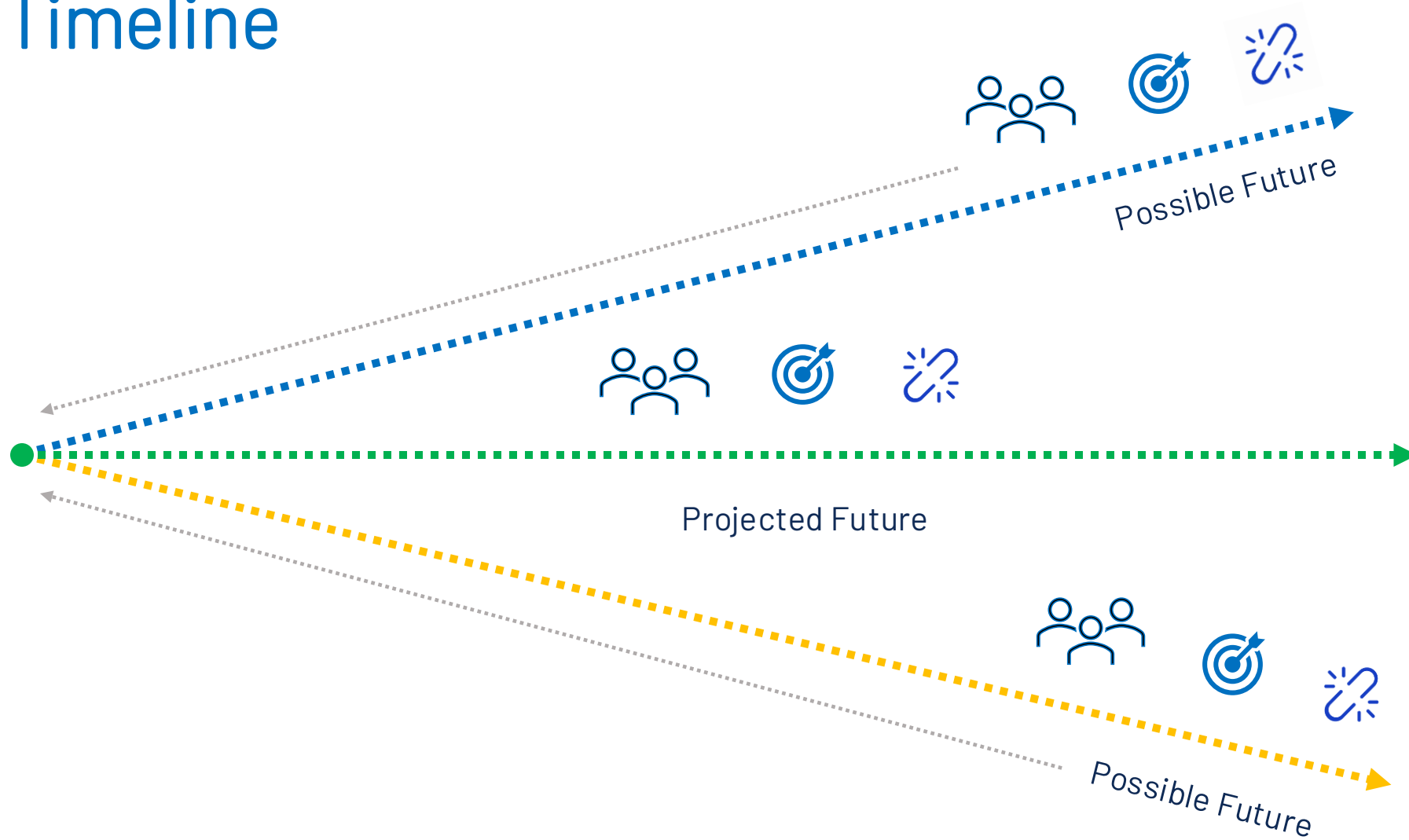


Stefan Bergheim

UNESCO, Center for
Societal Progress,
FUON Futures



The Timeline



Creating The Exploration Boundaries

“How will the rapid growth of smaller, more powerful smart devices and artificial intelligence, working alongside humans and robot surgeons, change healthcare and medicine by 2040?”



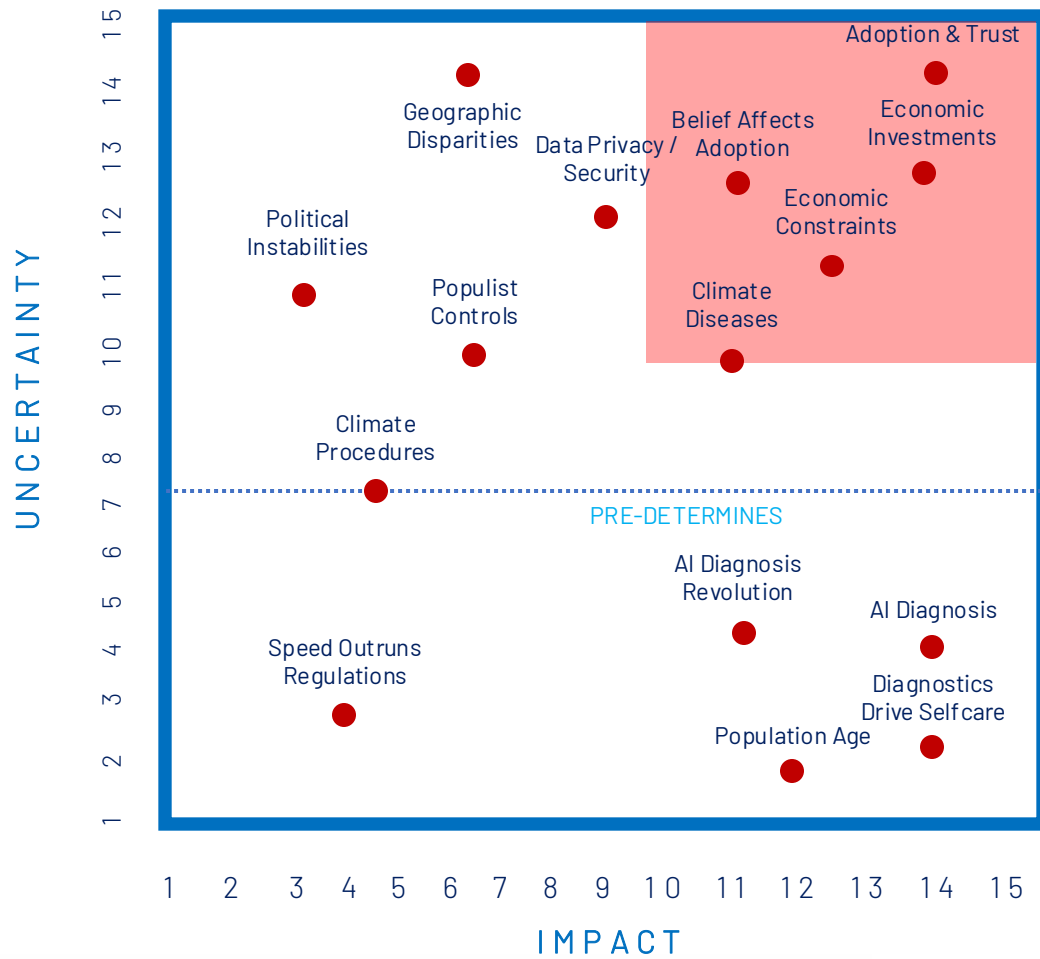
Scanning The Horizon for Drivers

22 Peer-Reviewed Papers 9 Articles

Driver Name	Description	Uncertainty	Impact
Population Age	The aging population may require different healthcare services than younger populations.	2	10
Adoption and Trust	Ethical considerations around the use of AI and machine learning in healthcare may affect adoption and trust.	15	15
AI Diagnosis Potential	The potential for AI and machine learning to improve diagnosis and treatment may outweigh concerns about privacy and security.	3	14
Beliefs Affect Adoption	Public perceptions and beliefs around healthcare technologies may affect adoption and use.	13	13
Diagnostics Drives Self-Care	The rise of digital health tools may drive changes in cultural attitudes towards self-care and prevention.	1	12
Speed Outruns Regulations	The pace of technological advancement and adoption may outstrip regulatory frameworks and ethical considerations.	4	4
AI Diagnosis Improvements	Advancements in AI and machine learning may revolutionize healthcare by improving diagnosis and treatment.	5	11
Data Privacy/ Security	Data privacy and security concerns may drive the development of new legal frameworks for healthcare data.	12	9
Economic Access Constraints	Economic constraints and healthcare costs may limit access to new technologies and treatments.	12	12
Technology Investments	The shift towards value-based care may drive investment in new technologies and treatment methods.	13	14



Critical Uncertainties Analysis



ADOPTION & TRUST

Wide and deep trust of new technologies in healthcare.

Distrust and concerns, whether through education or political discourse.

AVAILABILITY

New technologies are widely available through investments and access.

Little access, some technologies are restricted due to insurance regulations, and some due to economics.



Scenarios



Scenario Artifacts

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4.2 SCENARIOS & IMPLICATIONS

S2: Hurdles to Overcome
S.W.O.T ANALYSIS

 **STAKEHOLDER LENS**
Hospitals and healthcare workers

Low Adoption, High Availability

 STRENGTHS	 WEAKNESSES	 OPPORTUNITIES	 THREATS
<p>The procedures are available to those that want them.</p> <p>Lower wait times for people that trust in the new technology.</p>	<p>Fears around robotic surgeons or AI and privacy could continue to wreak havoc on adoption, making it harder and harder for investments to accelerate.</p> <p>Presidents, senators, and congressional officials that politicize this could stifle innovation by turning society against it.</p>	<p>With a smaller group of patients coming in to try the new procedures, it allows hospitals and healthcare providers the time to evolve to the "new normal."</p> <p>How might hospitals create a way to educate the public on the new technologies?</p>	<p>Other hospital networks will continue to work on the adoption issue by potentially creating educational channels to help those that are resistant become more informed and understand the benefits of the new technology. Those that fail to do this could lose significant business.</p>

Charles Platt (FIS 3D7) Professor Lauren Kessler

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Scenario Artifacts

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4.2 SCENARIOS & IMPLICATIONS

S2: Hurdles to Overcome

FLASH NARRATIVES

Low Adoption, High Availability

Samantha had been waiting for this moment for months. Ever since her doctor had recommended robotic surgery to treat her cancer, she had been doing research and digging through forums and conspiracy theory websites to find out the truth about these machines.

As she sat across from her doctor, she finally spoke up. "I'm sorry, Doctor, but I've decided I don't want robotic surgery."

The doctor was taken aback. "May I ask why?"

Samantha took a deep breath. "I've done my research, mostly on YouTube and some Alex Jones videos. I've read a lot of things that make me concerned. I think there might be some kind of conspiracy going on, and I don't trust these machines."

The doctor tried to reassure her. "Samantha, the benefits of robotic surgery are well-documented. It's minimally invasive, reduces tissue damage, and it shortens recovery time."

But Samantha wasn't convinced. "I just don't want to take any chances. I don't want something inside me that I don't understand or trust."

The doctor nodded, understanding. "It's your body, and ultimately, it's your choice, Samantha. While I would like you to take the time to reconsider, and listen to other experts, we can explore other options for your treatment."

Charles Plath | FIS 307 | Professor Lauren Keeler

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Thank You



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