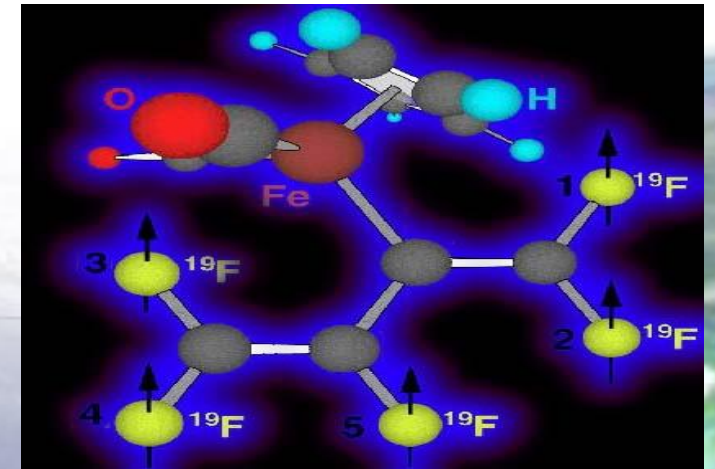


# The Extreme Future: Top Trends Shape the 21<sup>st</sup> Century

Dr. James Canton  
CEO & Chairman  
GlobalFuturist.com

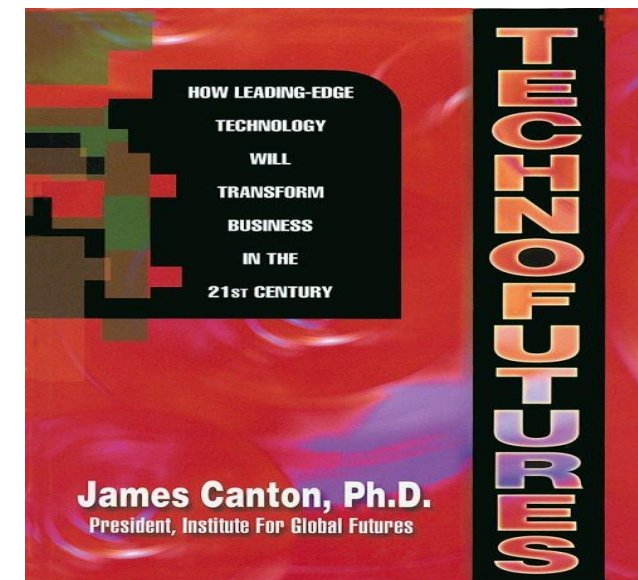
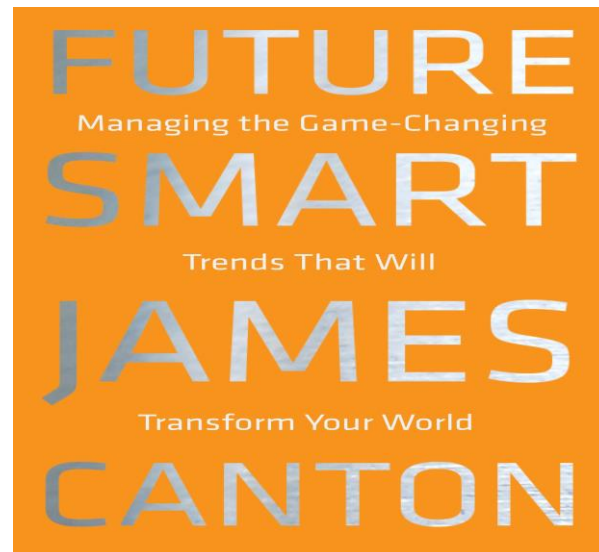


# Institute for Global Futures

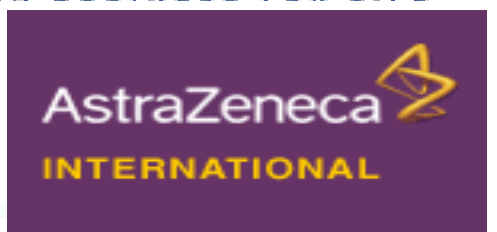
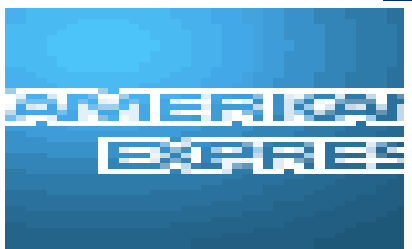


## Global Think Tank

- Advise Fortune 1000
- Futures Strategy



# Worldwide Clients



COURTESY: GENERAL ELECTRIC

PERFORMANCE THROUGH INNOVATION  
BARCLAYS GLOBAL INVESTORS

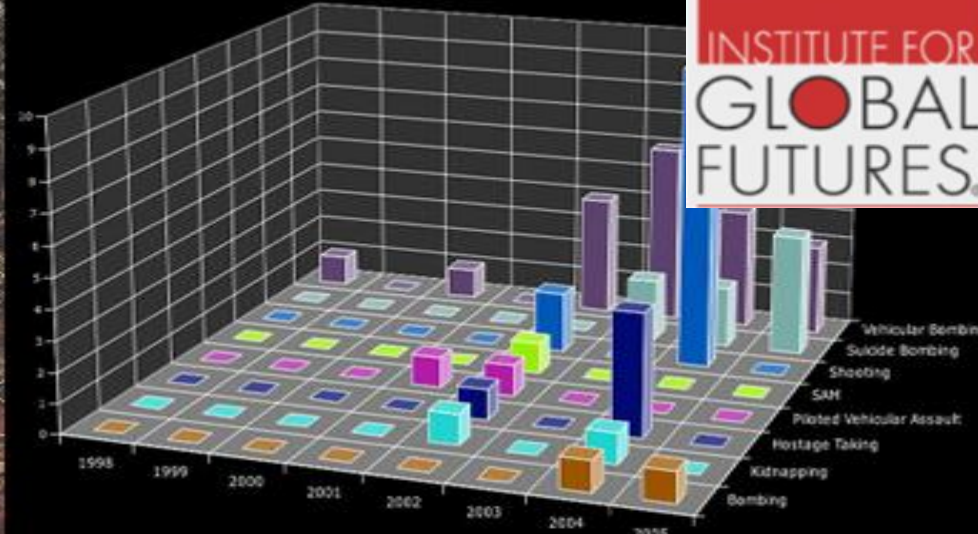
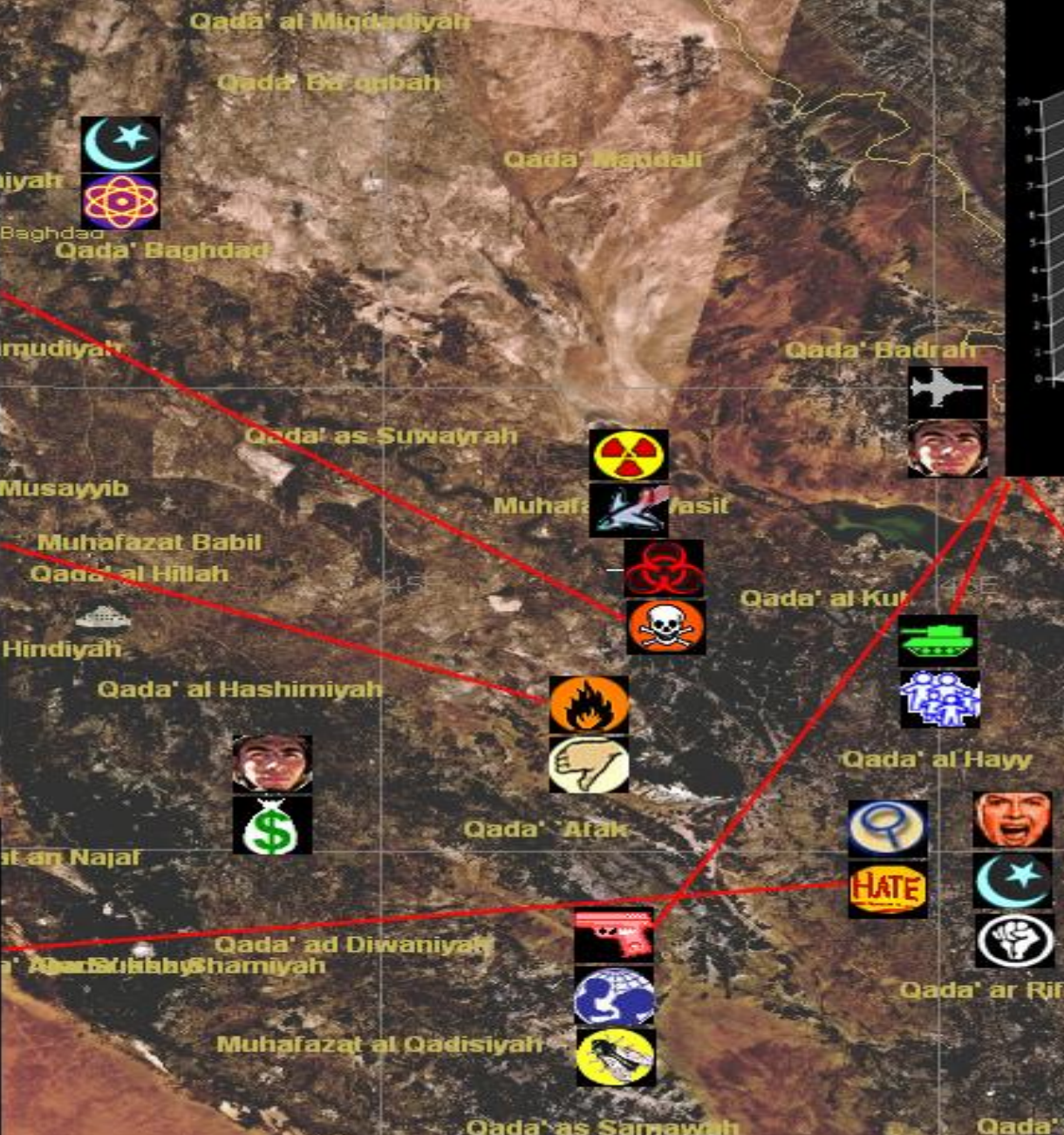
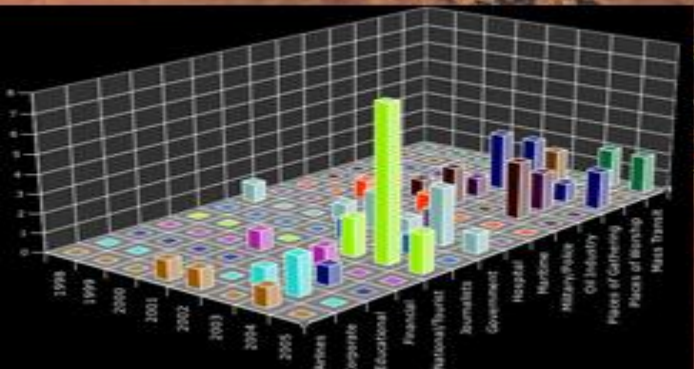
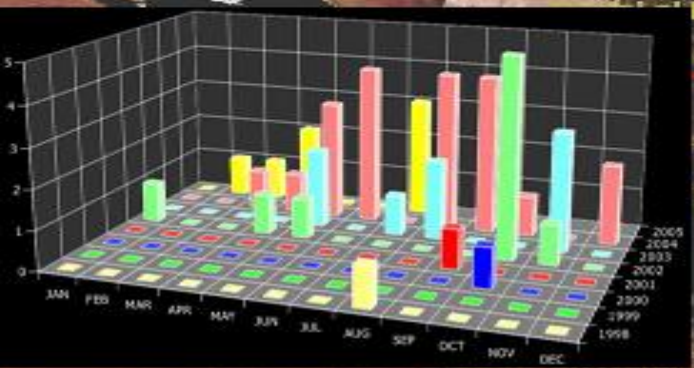
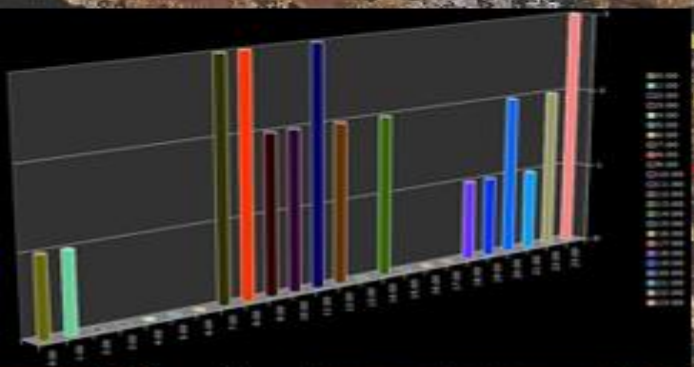


# Institute for Global Futures



# Trend Trakker: Predictive Forecasting

**IGF Trend Trakker**  
**ASYMMETRIC HOTSPOTS**  
**INT 110206-140206**



**INSTITUTE FOR**  
**GLOBAL**  
**FUTURES.**



# Key Themes

- Future MegaTrends
- Emerging tech
- Innovating smarter
- FinTech customers





Mode: Multi  
PSD: ME  
St: I

TR: 650.0  
TE: 16.0 1/1  
16 kt  
256x192/.75NEX  
FOV: 24 cm  
Thk: 5.0 mm  
Imgs: 15/01:42  
Head

TR: 50.0 1/1  
TE: 6.0 16 kt  
56.192  
24 cm  
5.0 mm  
01:42

FOV:  
Thk:  
Imgs:  
Head

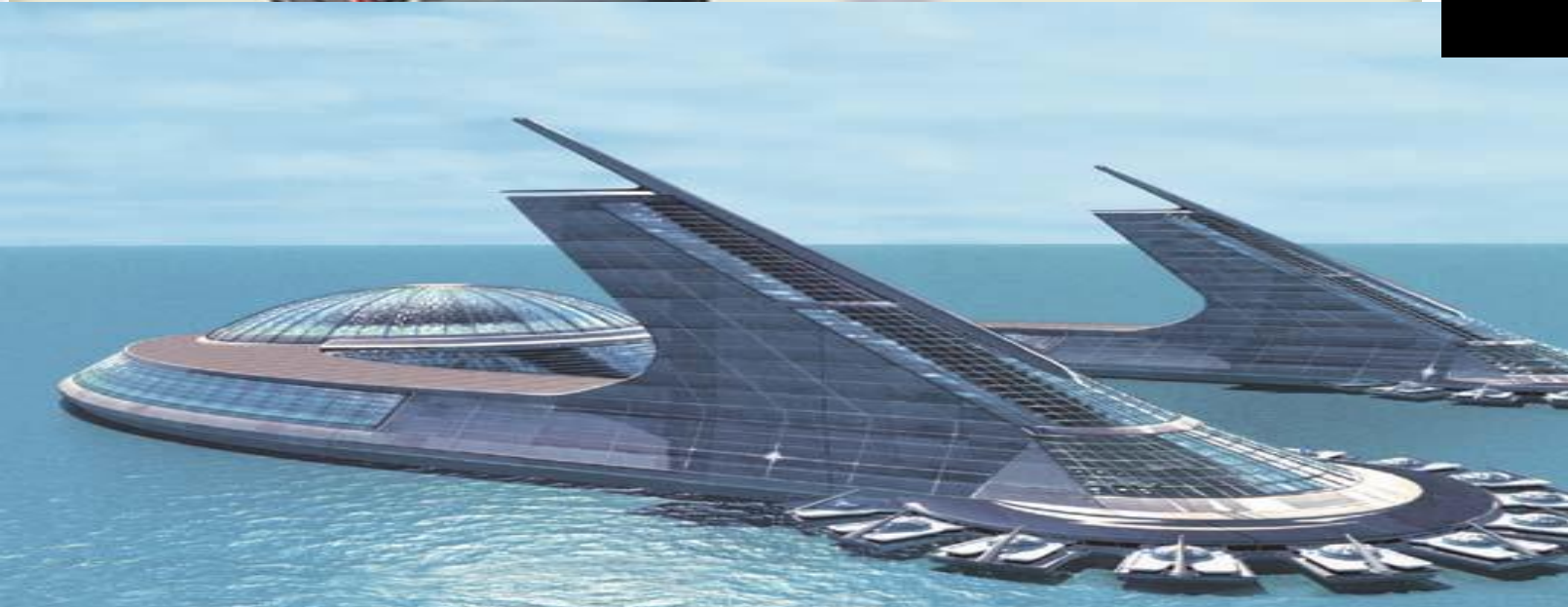
Extreme Future:  
Accelerated  
Change  
Risk &  
Opportunities

P  
1  
2  
0  
1  
1  
1  
1  
1

I120

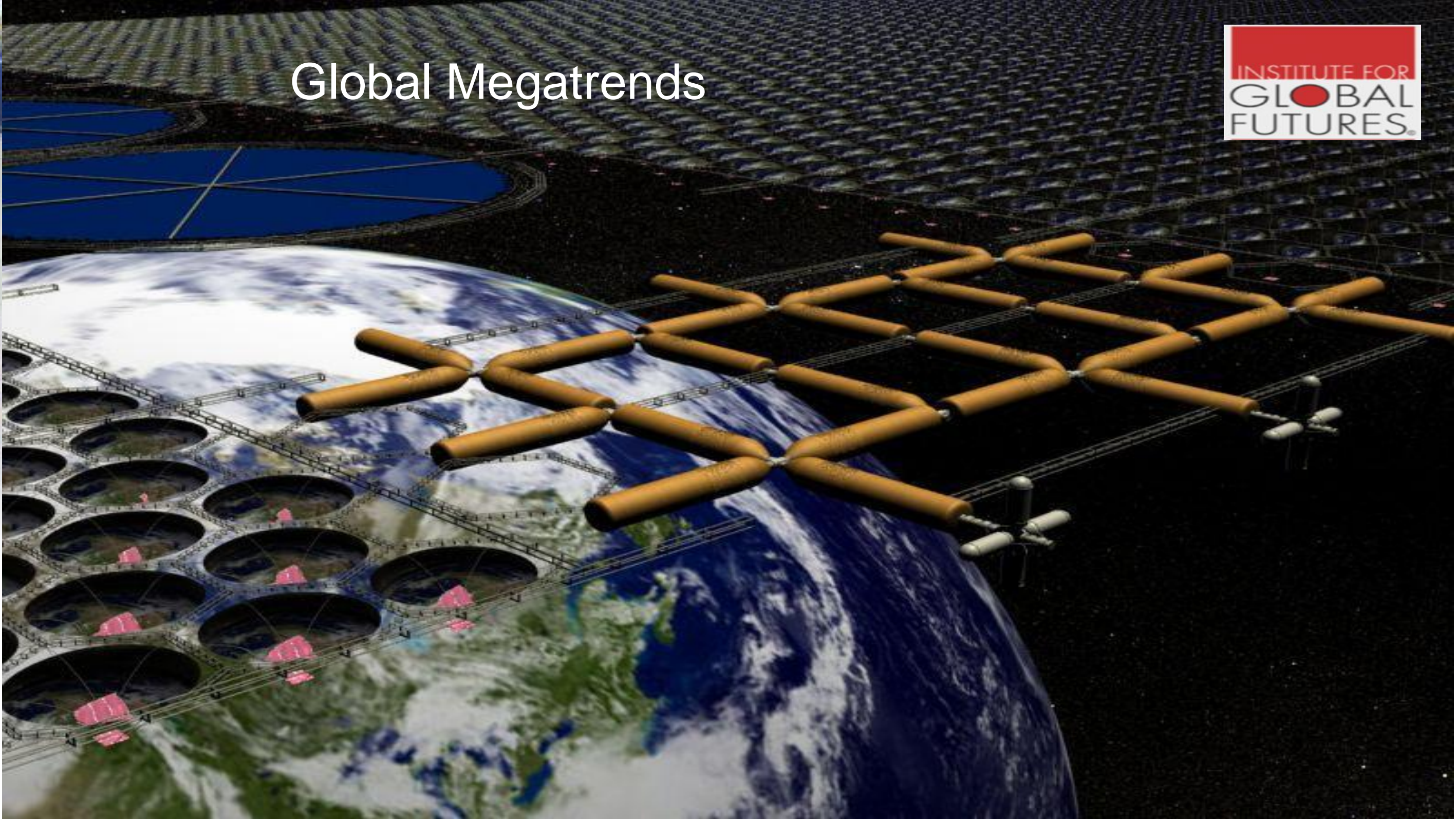
T120

# Are You Future Ready?





# Global Megatrends



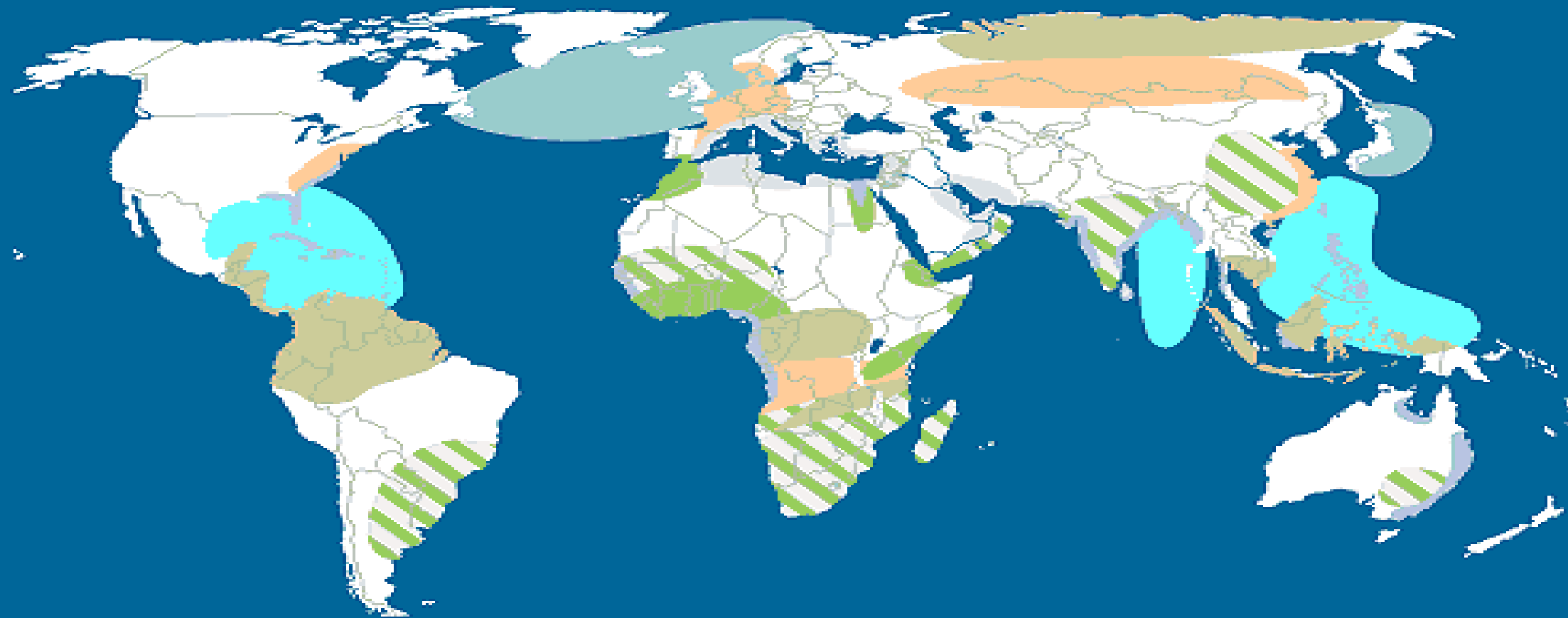
# Market Place of the Future

- Innovation driven
- Globalization
- Real-Time Digital
- Hyper-Competitive
- Fast Change



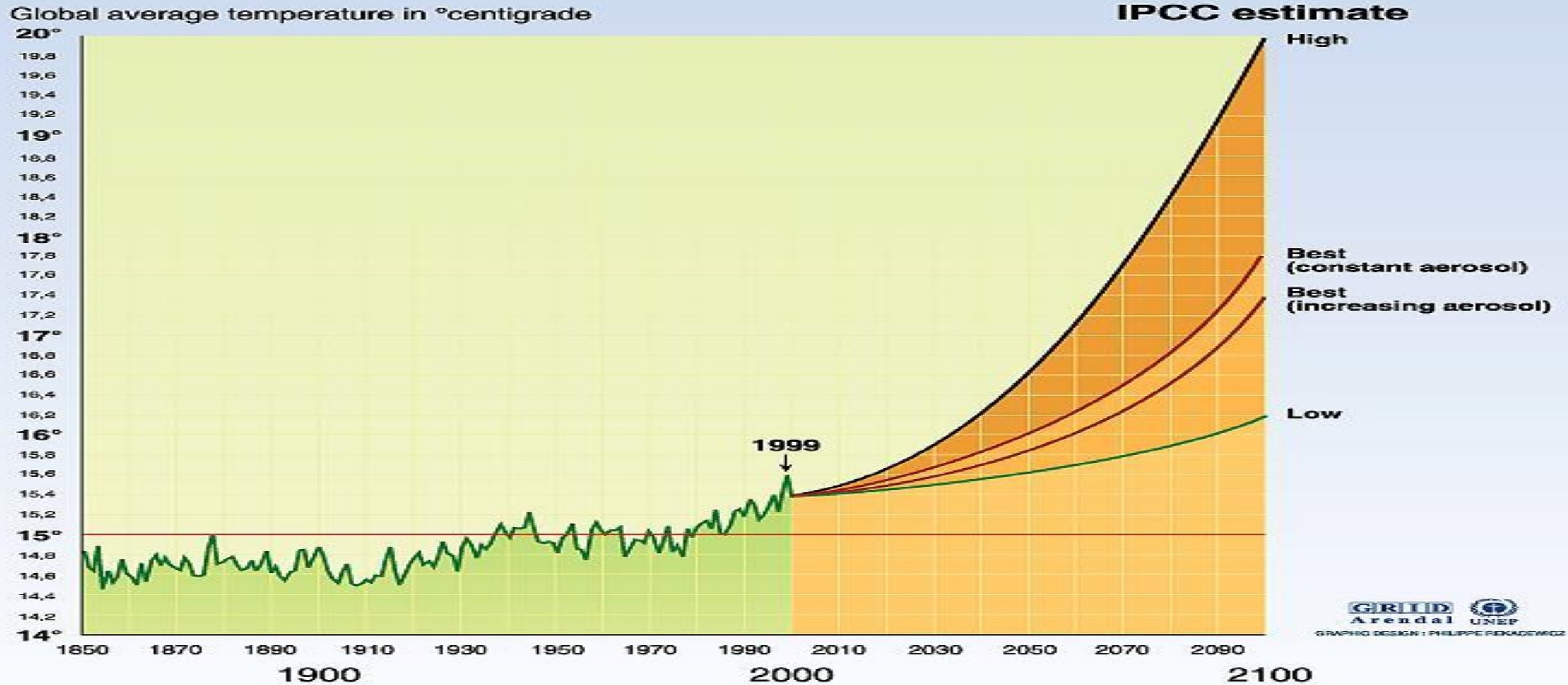
# Challenge: Sustainable Future

**The world in the 2050s** Assuming 'business as usual'



# Increased Climate Change Risk

**Projected changes in global temperature:**  
global average 1856-1999 and projection estimates to 2100

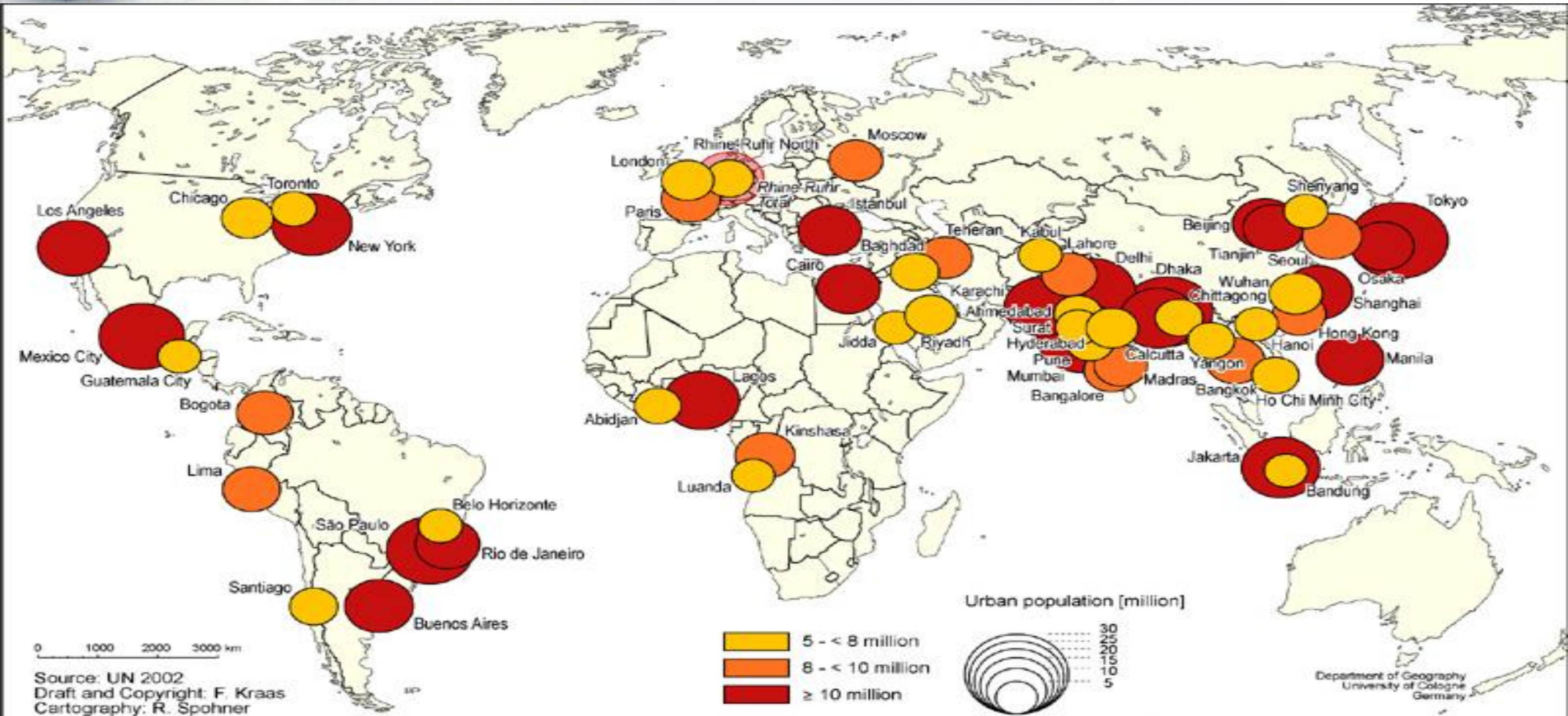








# By 2025: Most Megacities in developing world—Climate Change Risk





# Rise of Global Megacities

The World of 2025 100+ Megacities Most in China, India and Latin America

SAN FRANCISCO NIGHT VIEW, BAY BRIDGE AND BATTLESHIP SEARCHLIGHTS AND LIGHTS OF OAKLAND, 13



BERKELEY, ALAMEDA IN DISTANCE

COPYRIGHT 1930 BY IRVING UNDERHILL, INC., N. Y. C.



EAST RIVER SHOWING BROOKLYN, MANHATTAN AND WILLIAMSBURG BRIDGES, NEW YORK CITY

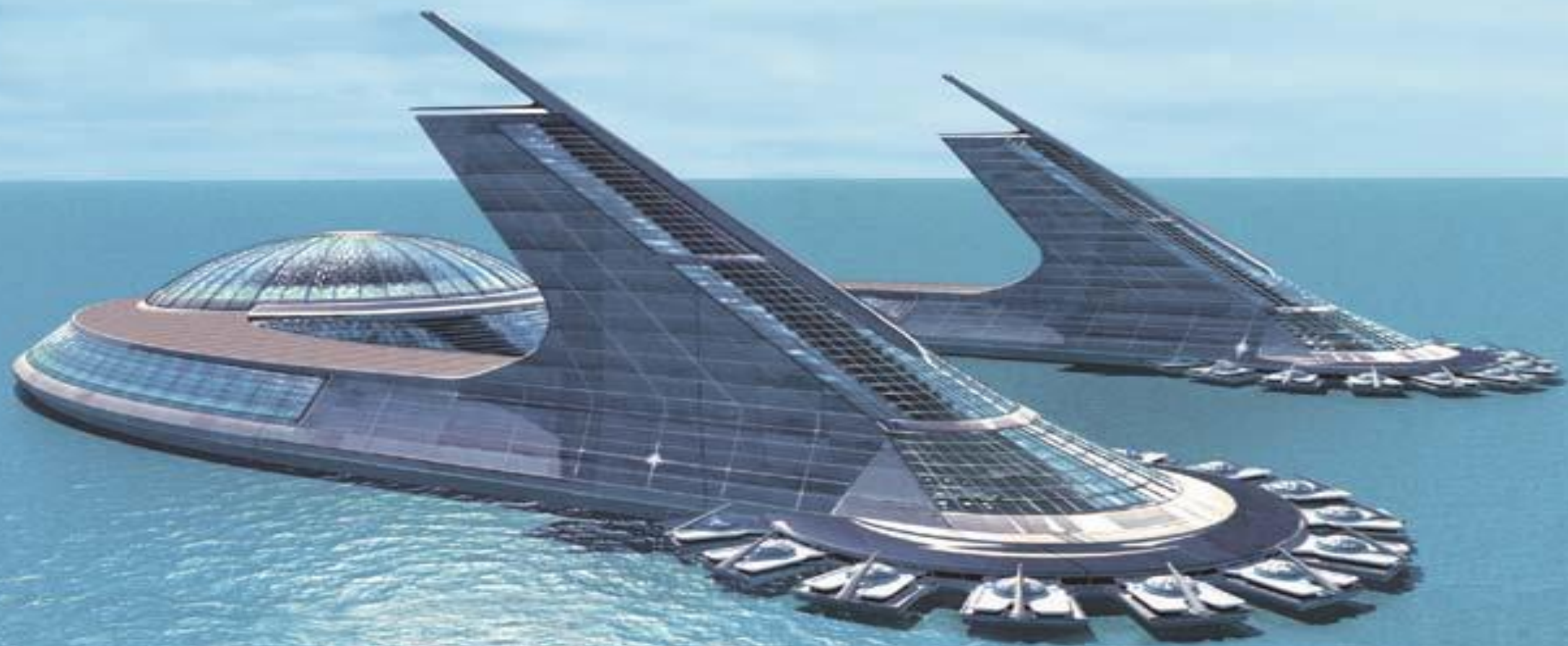
Half World Live in Cities=80% GDP



FOR  
BAL  
RES.

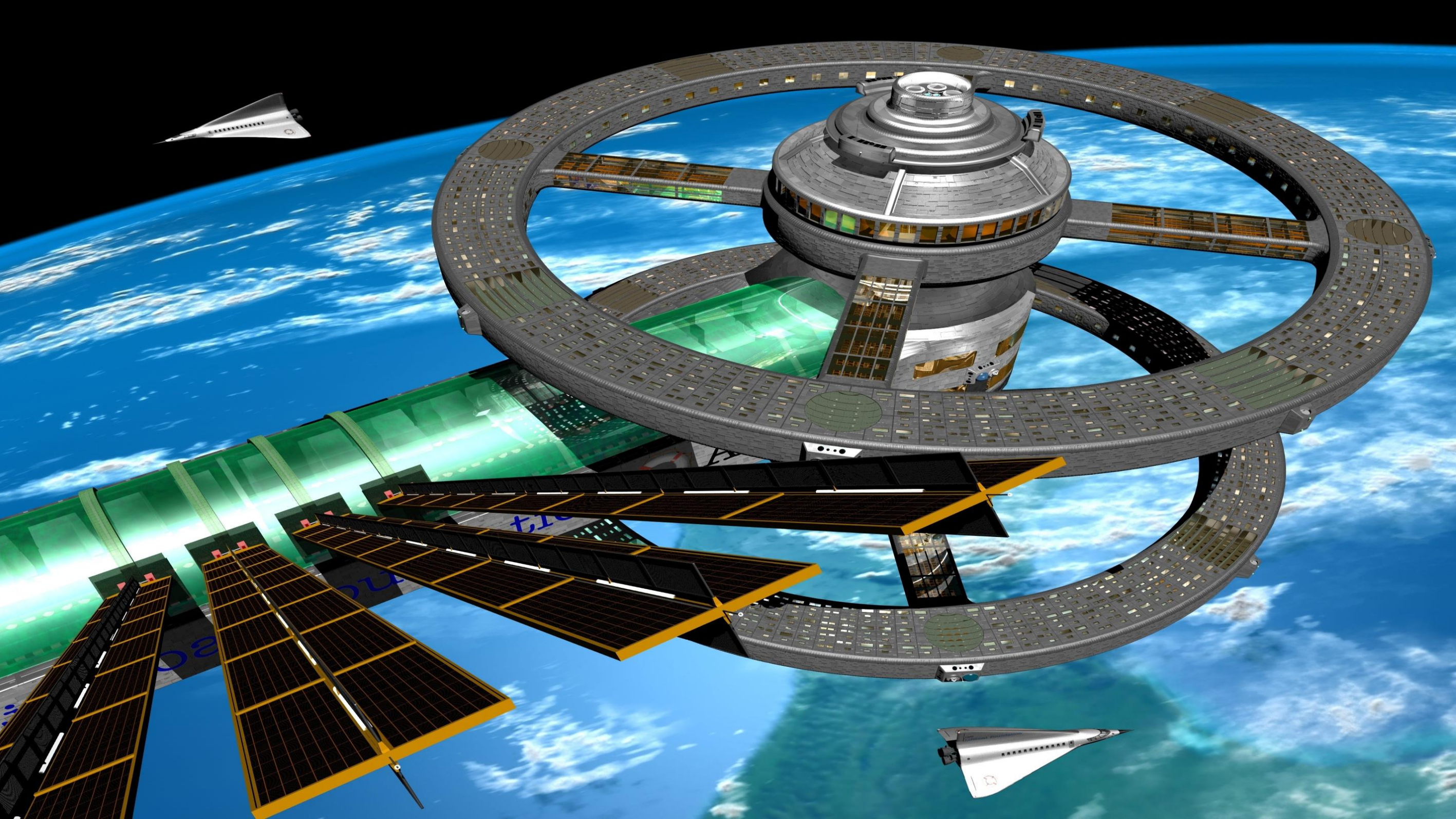
# Future MegaCities: Climate Adjusted





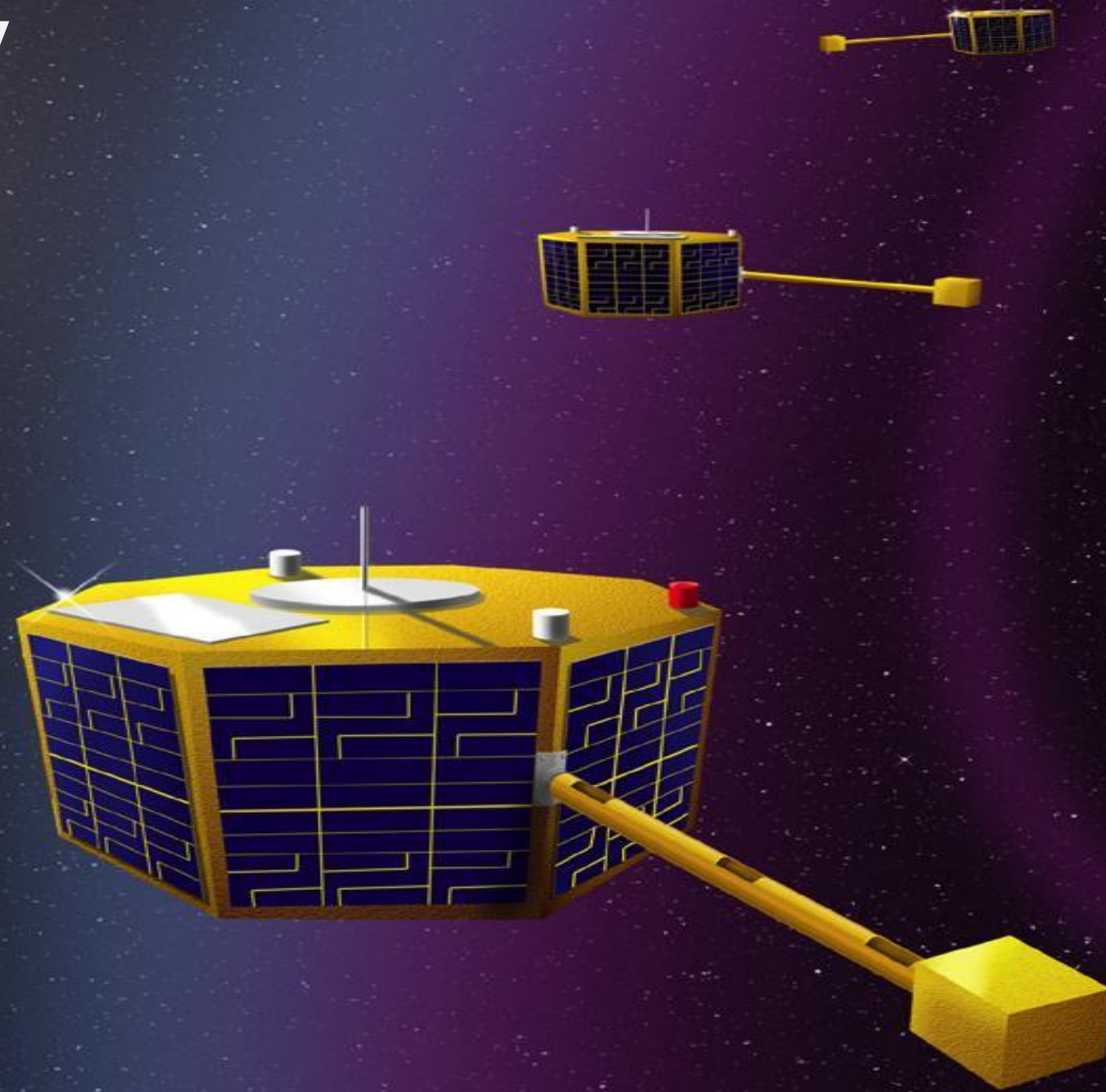
# Space Market: \$1 Trillion By 2025







# Future Energy





# Fusion Energy

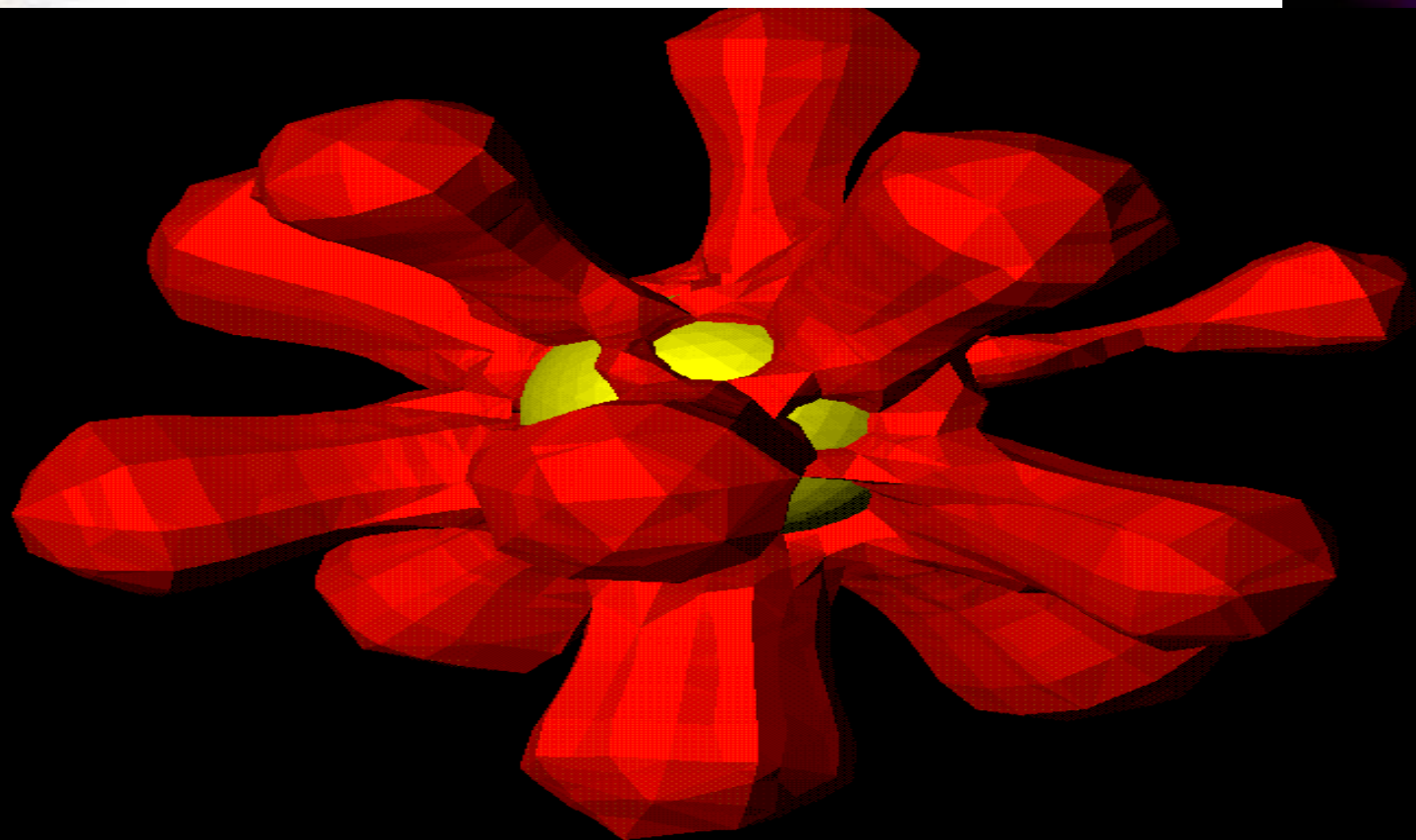
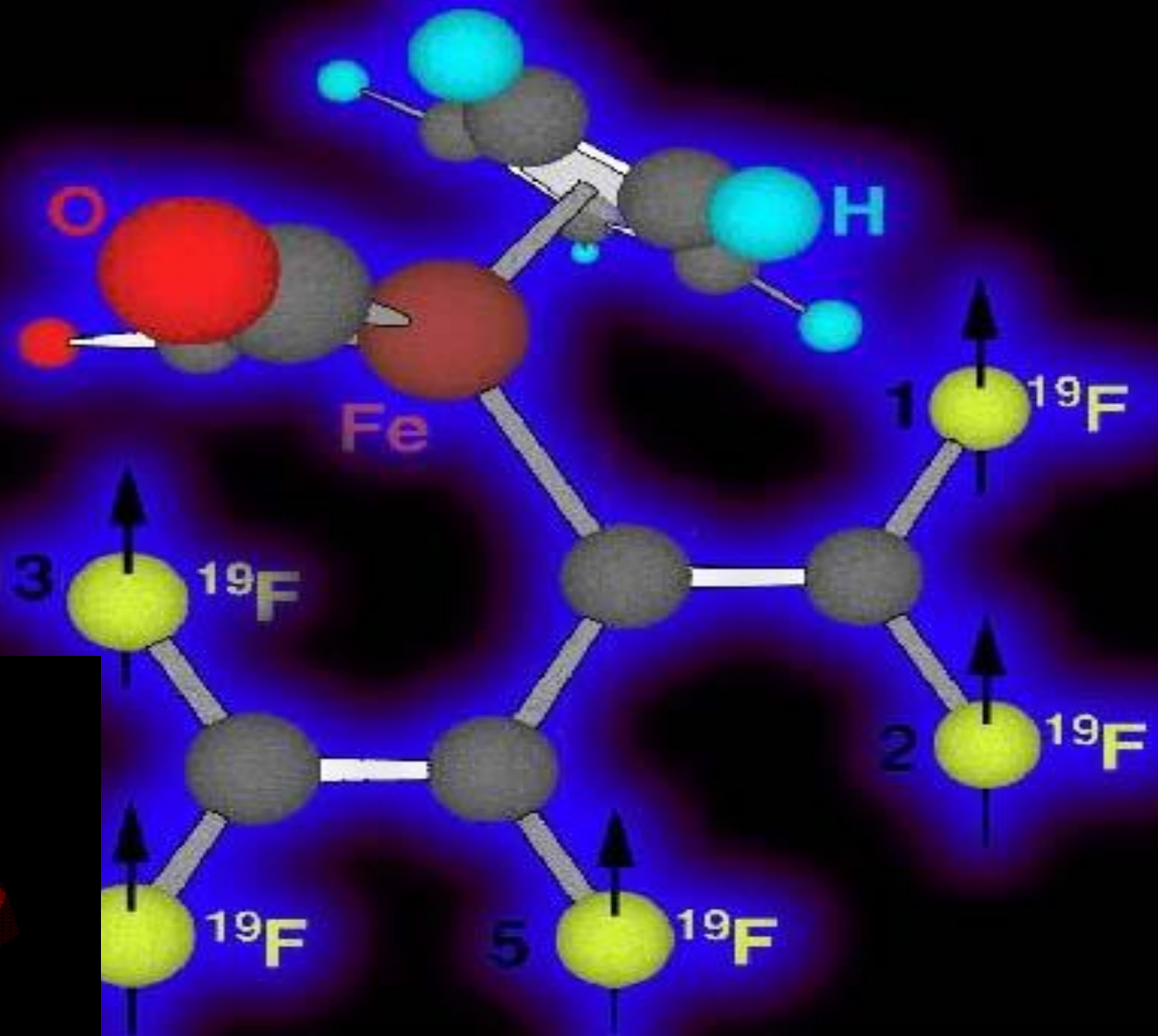


# Clean Tech: Planet Hacking



# Key Themes

This is the Early Stage  
of the Innovation  
Economy



Radical Innovation: Only Competitive Advantage



Innovate or Die



Innovators Mindset: Disrupt  
Yourself Before Your Competition  
Disrupts You



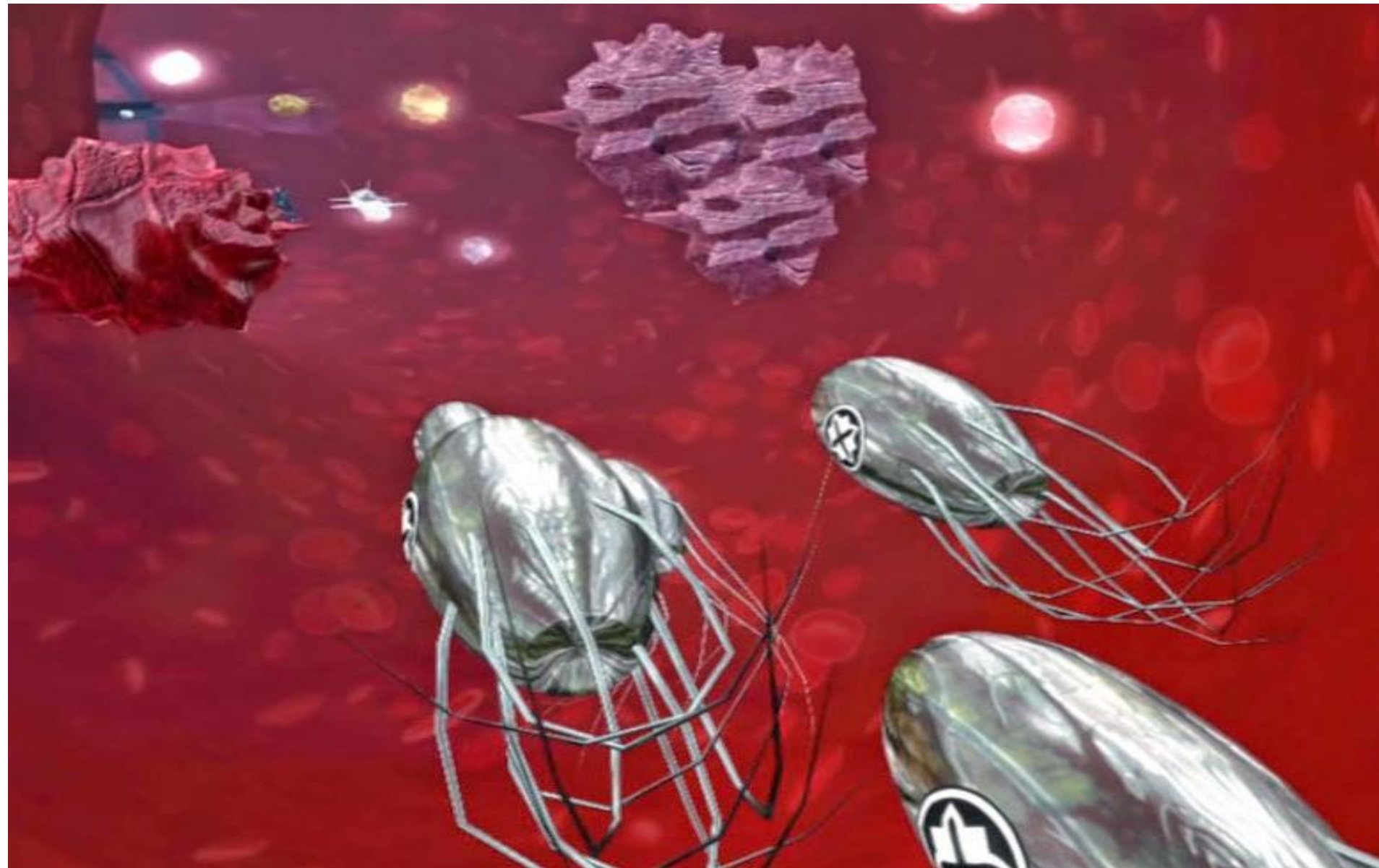
# How Innovators Think

1. Courage to create
2. Envision big
3. Learn new
4. Reward/Incentives



# Innovators Mindset: 7 Keys

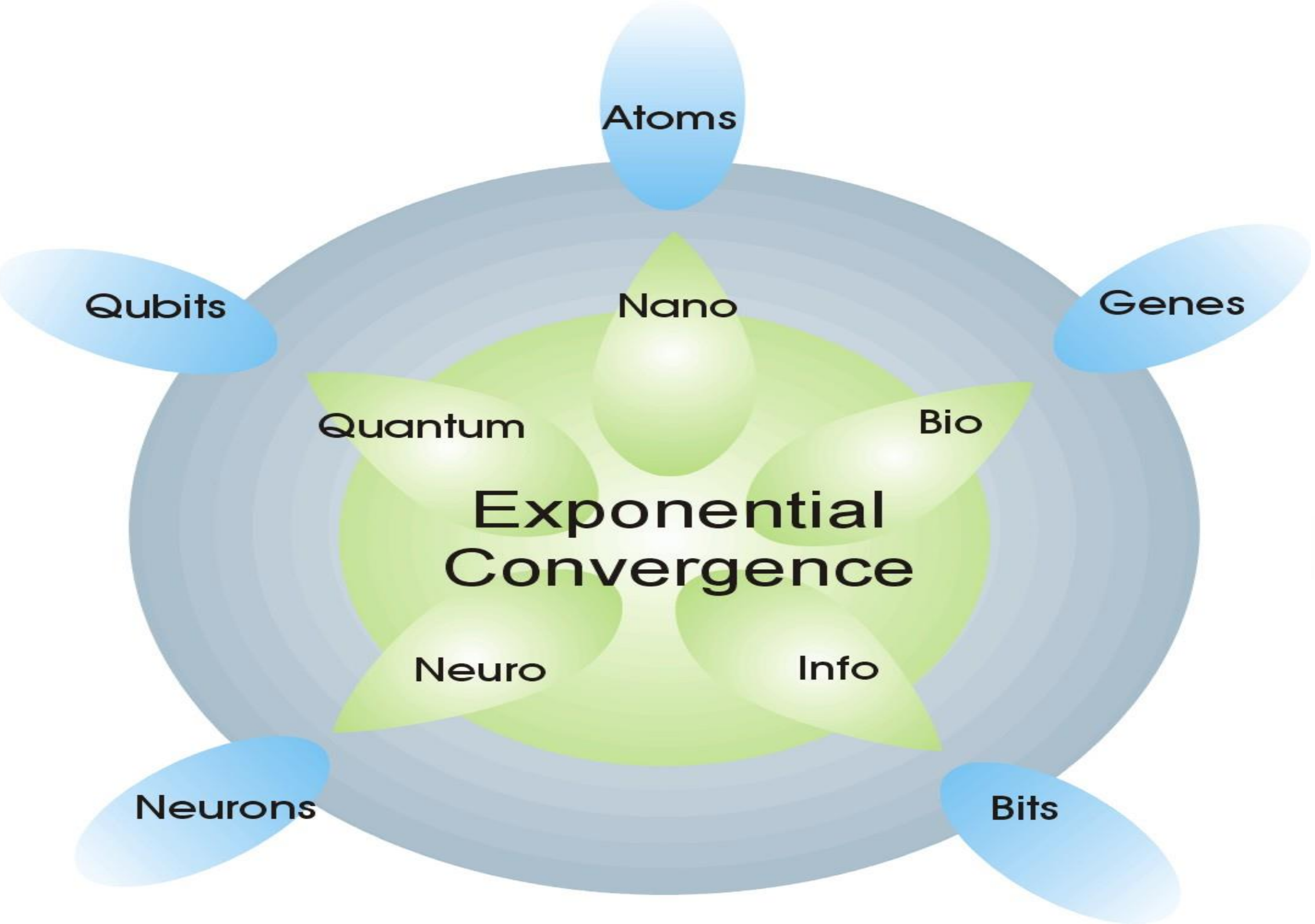
5. Future Ready
6. Look at Edge
7. Break the rules



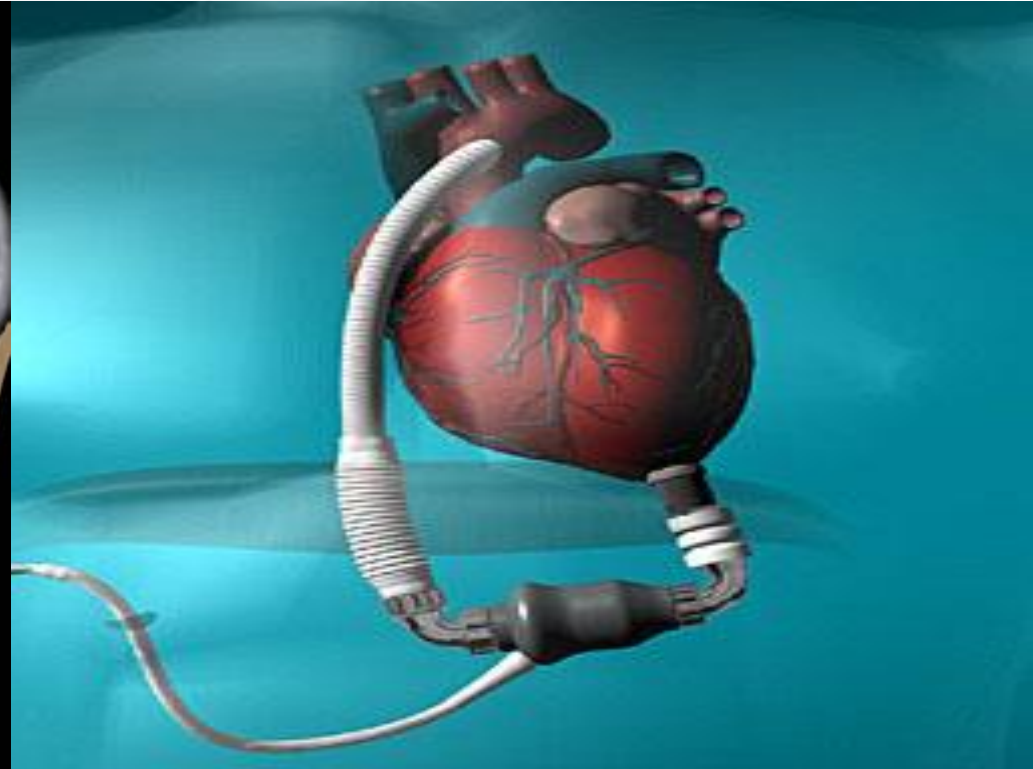
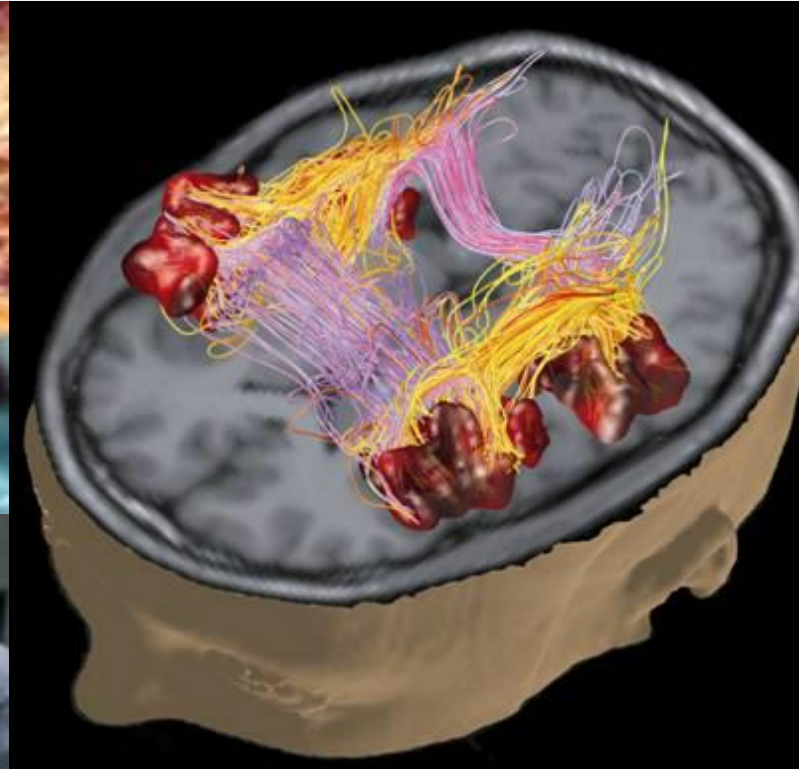
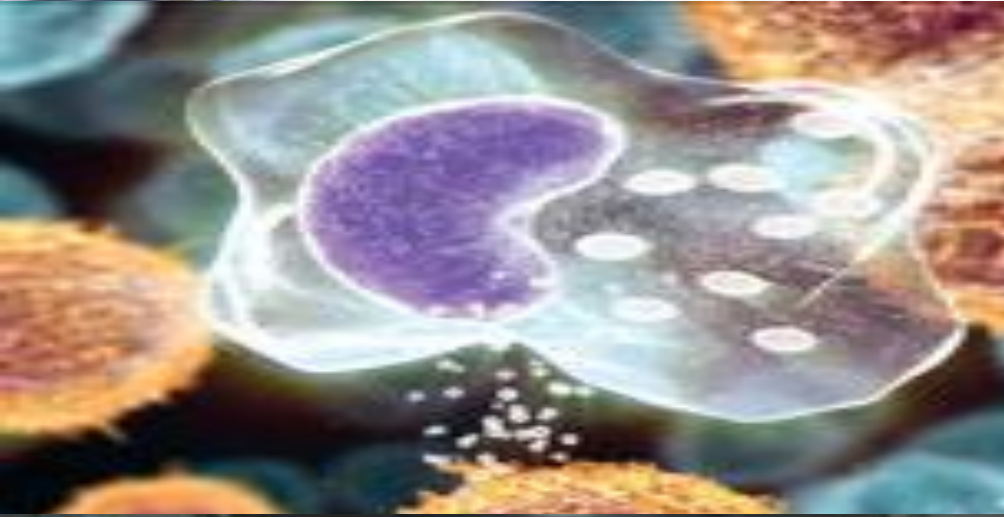


A man with a mustache, wearing a red vest over a grey long-sleeved shirt, stands in a futuristic, metallic environment. He is holding a large, complex, black and silver gun. To his left is a large, glowing blue and white energy sphere with jagged, lightning-like edges. The background features curved metallic walls and various pipes and conduits.

Act with Velocity



# Radical Tech Change



# Future Readiness: Digital Transformation



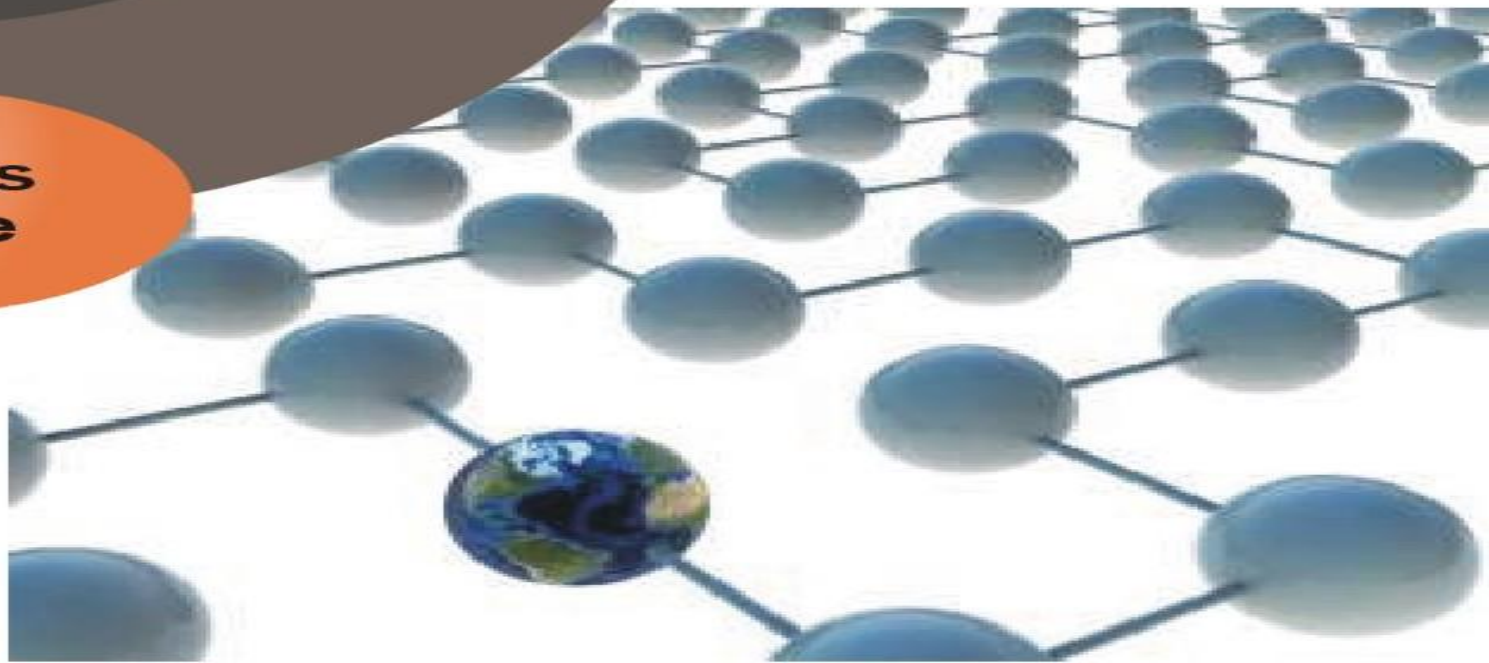


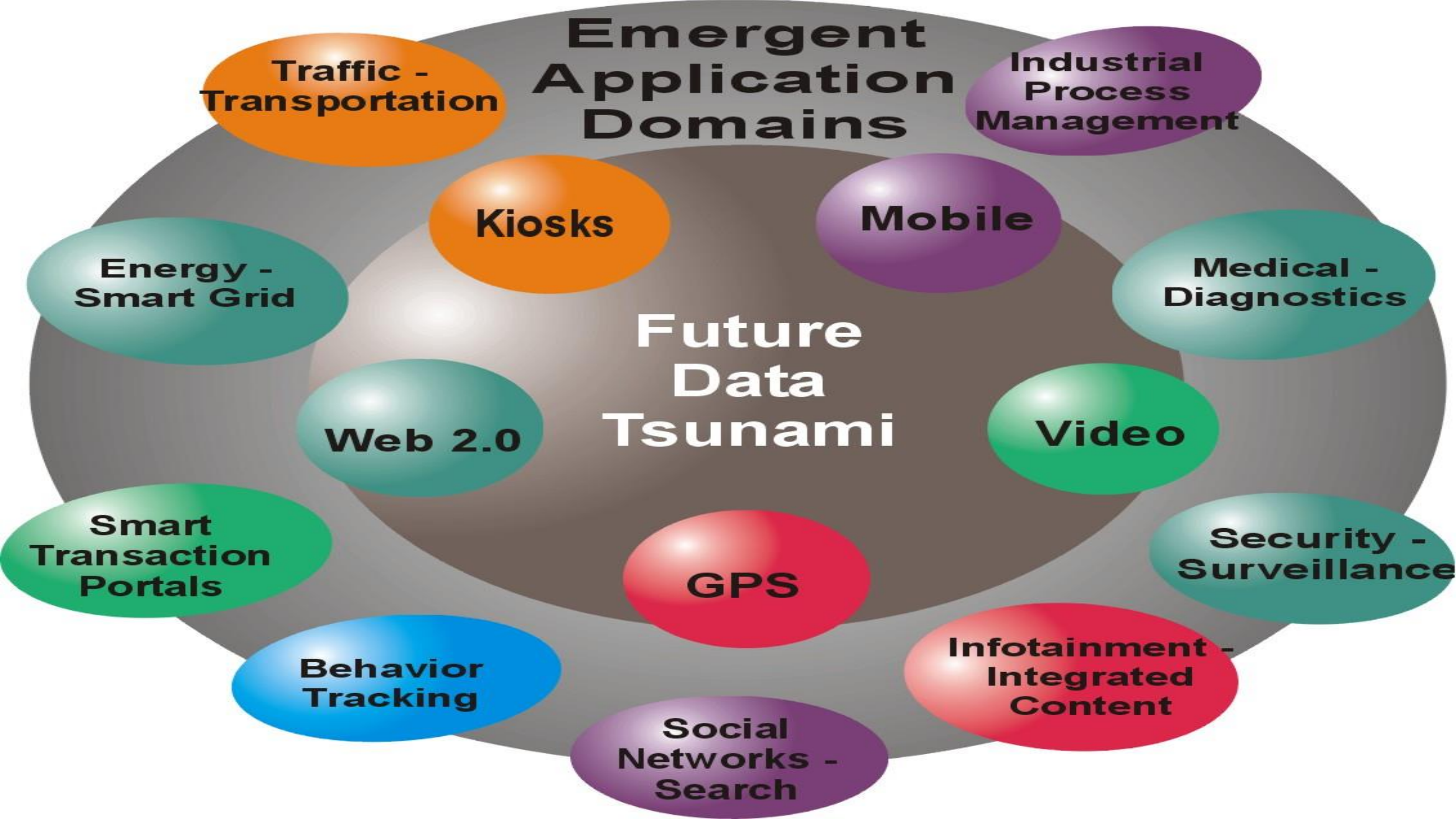
**Always  
Connected**

**Always  
On**

**Internet  
Futures**

**Always  
Aware**






By 2020 100 Exabytes 100B Devices



# Always on: Info That Predicts You

**Sarabeth's**  

[Detail](#) [Review](#) [Go](#) [Map](#) [Notes](#)

Show ▾ Walking Directions

Walking from Broadway & Amsterdam Ave, go North on Amsterdam Ave. (The first street you should pass is 72nd St.) Go 0.5 miles to Sarabeth's at 423 Amsterdam Ave.



[What](#) [Where](#) ▾ 42nd & Broo 

 **eat**

**My Cities**

Boston (173K)	<a href="#">Add</a>
New York (281K)	<a href="#">Edit</a>
San Francisco (141K)	<a href="#">Beam</a>

Total size of Vindigo: 836K

[Done](#) [Wireless Sync](#)



22:45



# The Internet of Things



**Sentient Environments**

**People & Smart Object Integration**

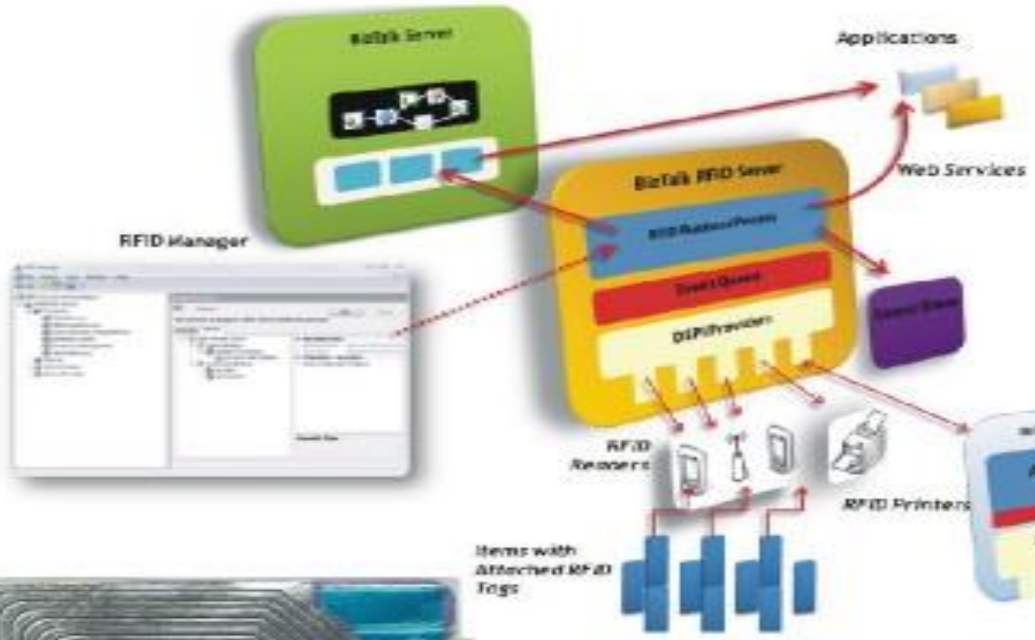
**Aware Object Management**

**RFID / NFC Detectable Objects**

2010

2020

2030



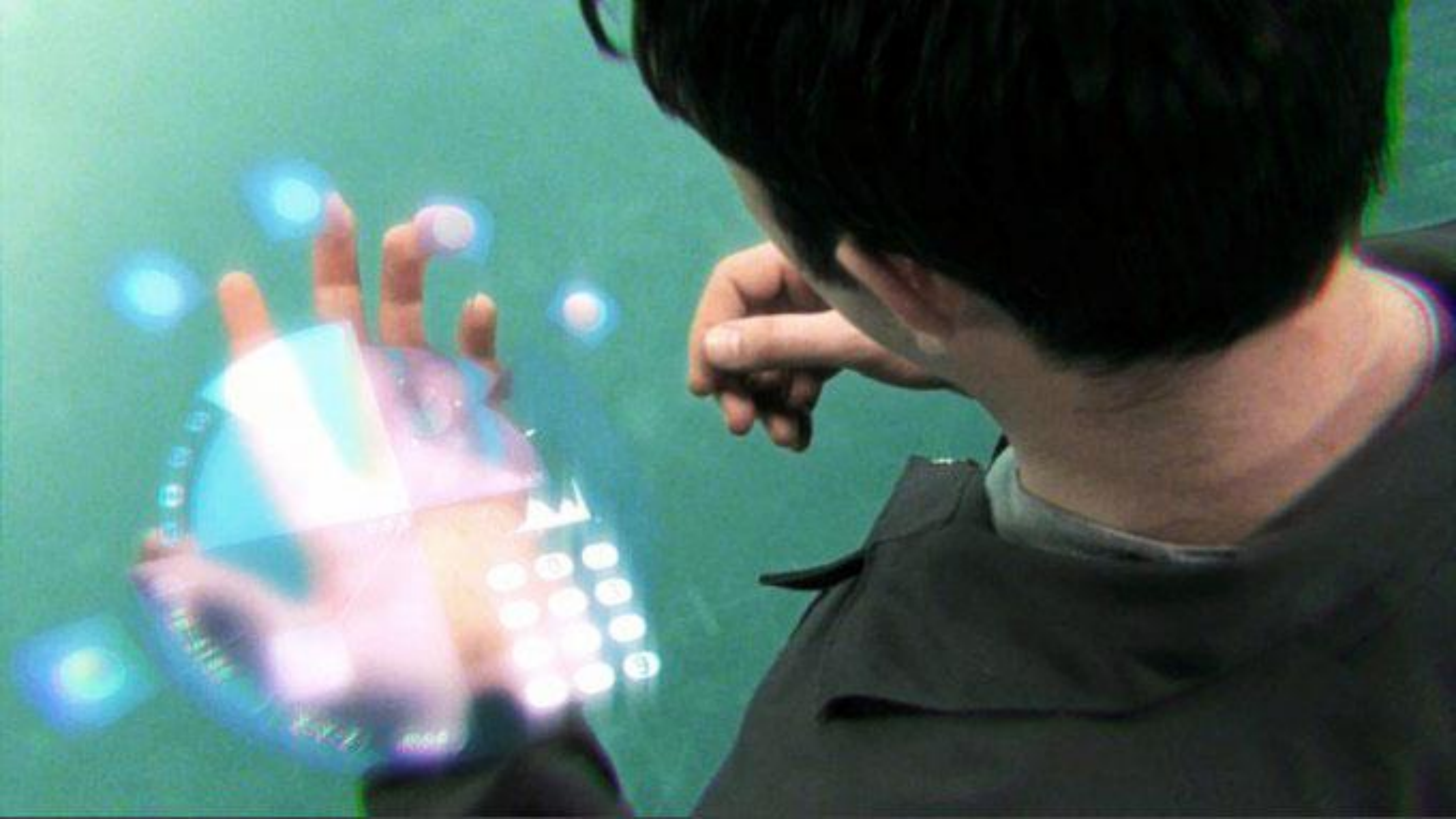
# Virtual Reality





# Big Data/AI Convergence





available at Bloomingdale's 0.25 miles

EMILY SALON  
1000 34th Street, San Francisco, CA



**SOLO-JOAN TRENCH COAT**  
Available at Bloomingdale's

\$279

360°



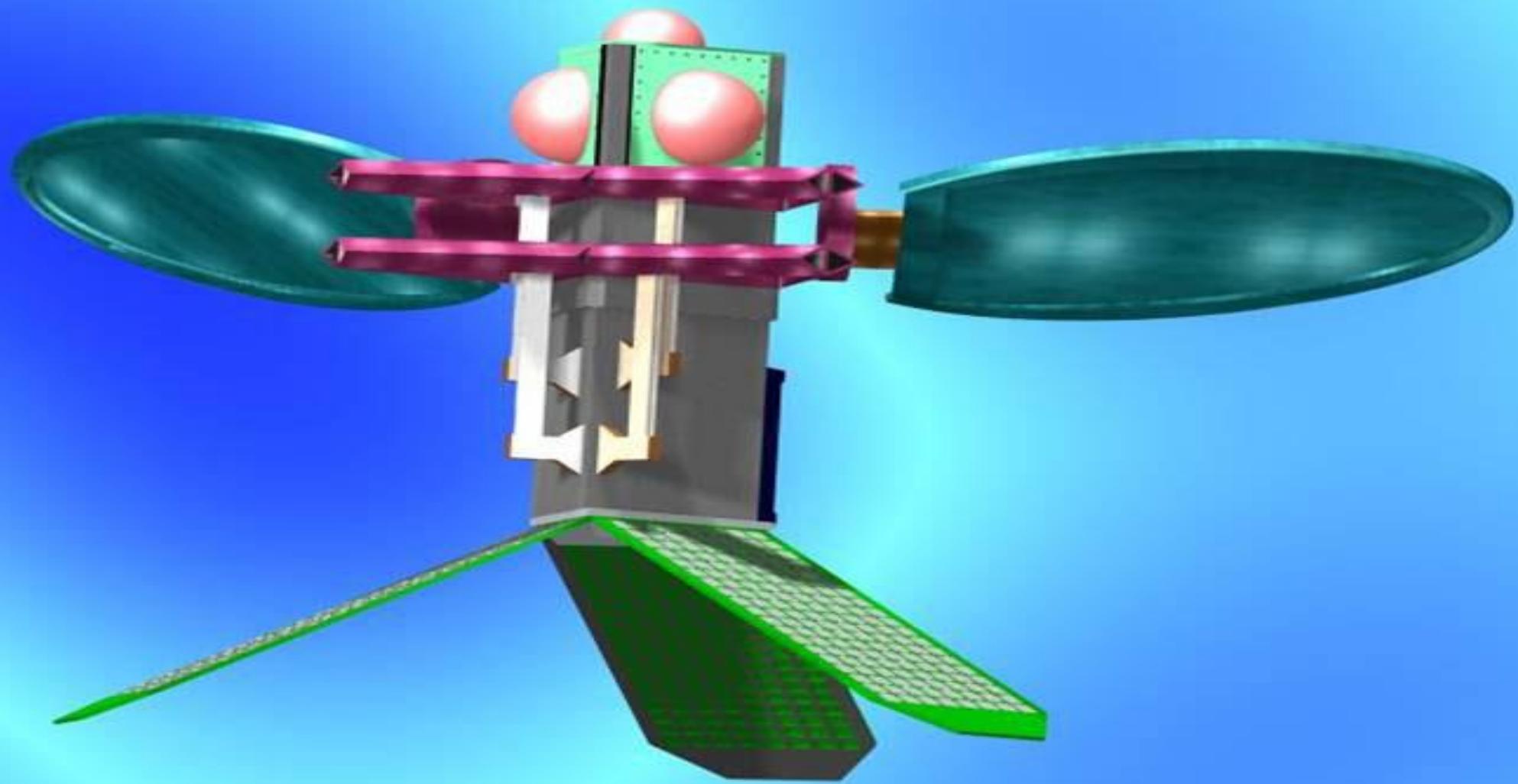
"Great Coat for the color goes with everything"







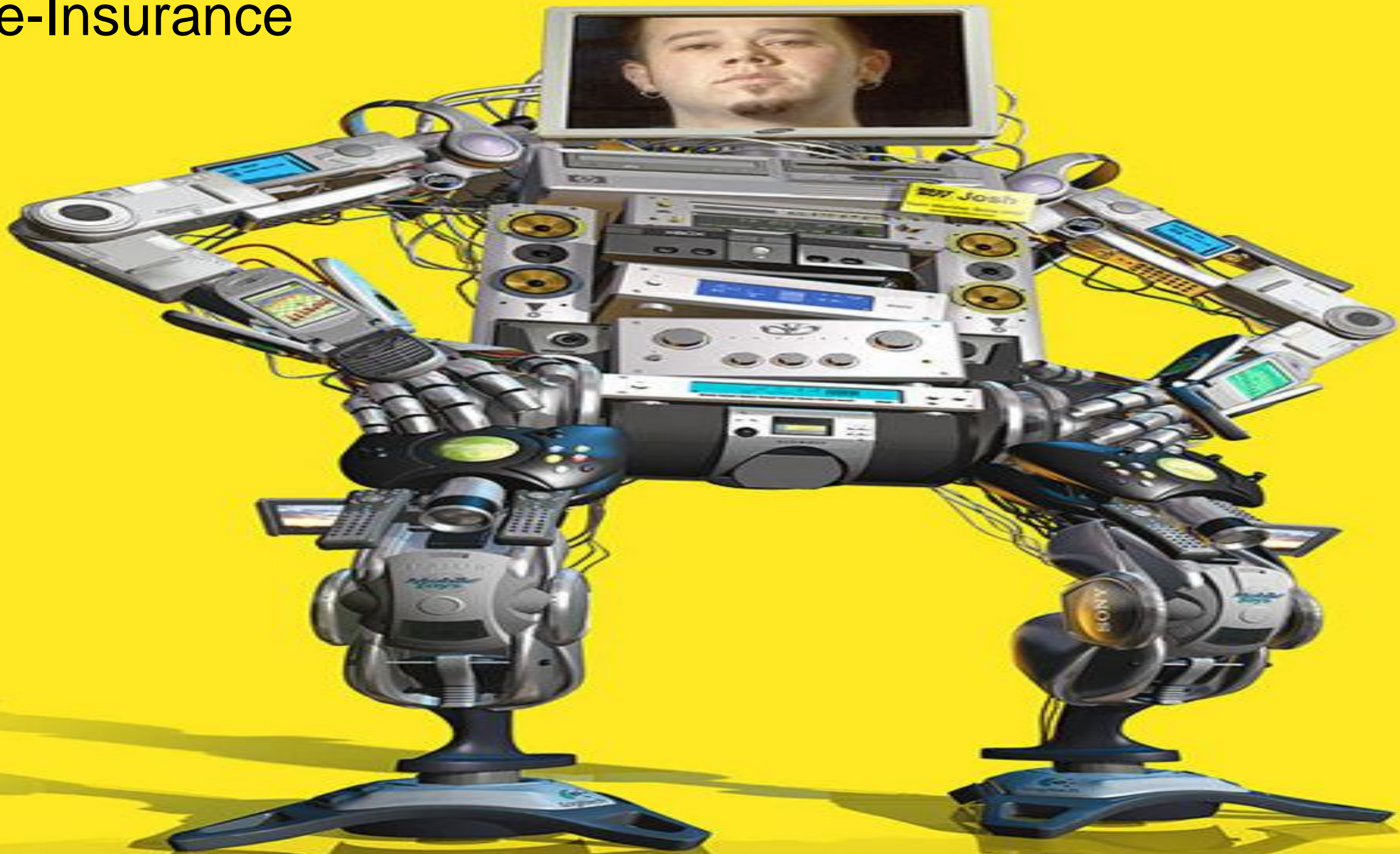


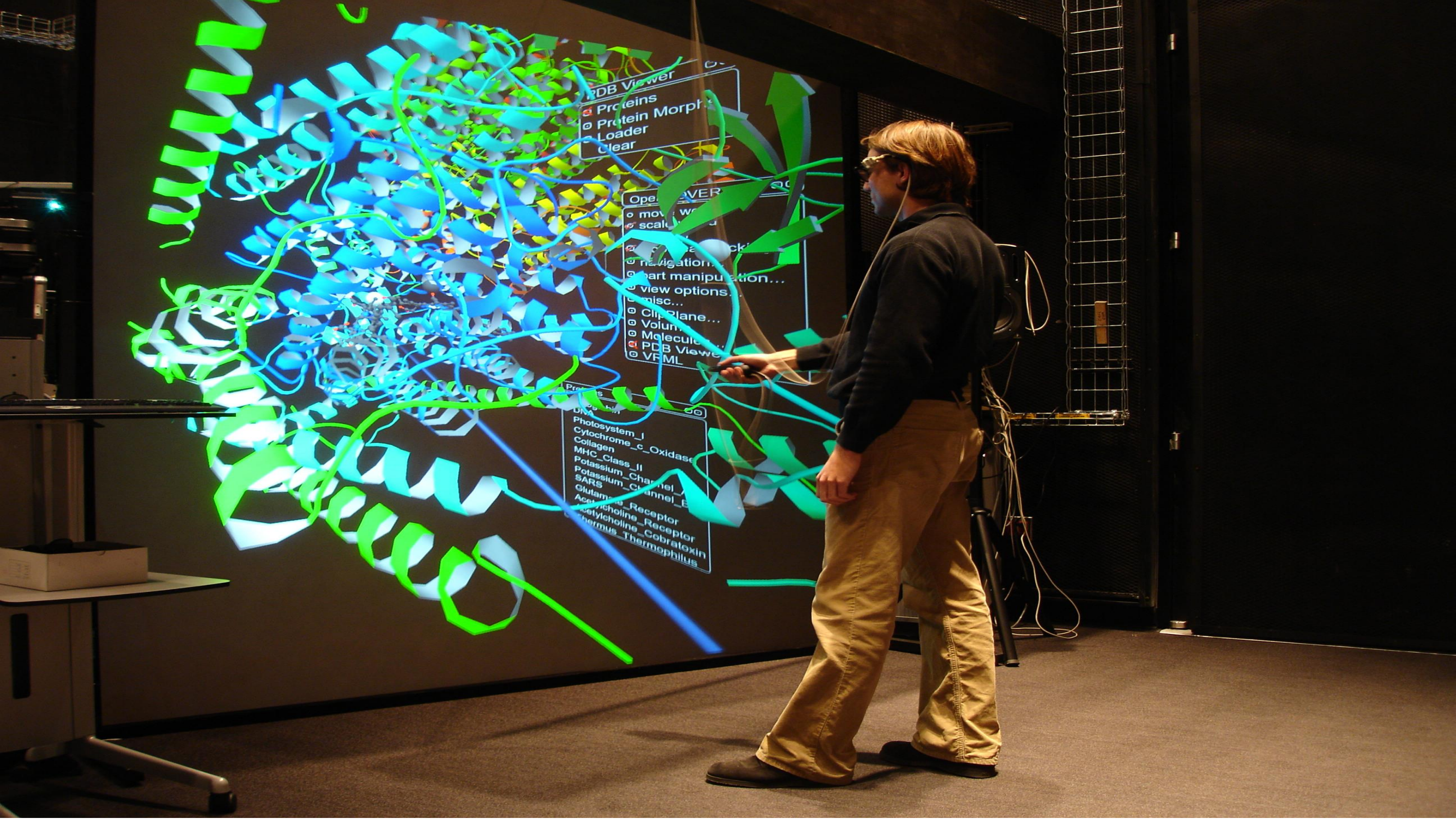


# Co-Evolution



# Tele-Insurance



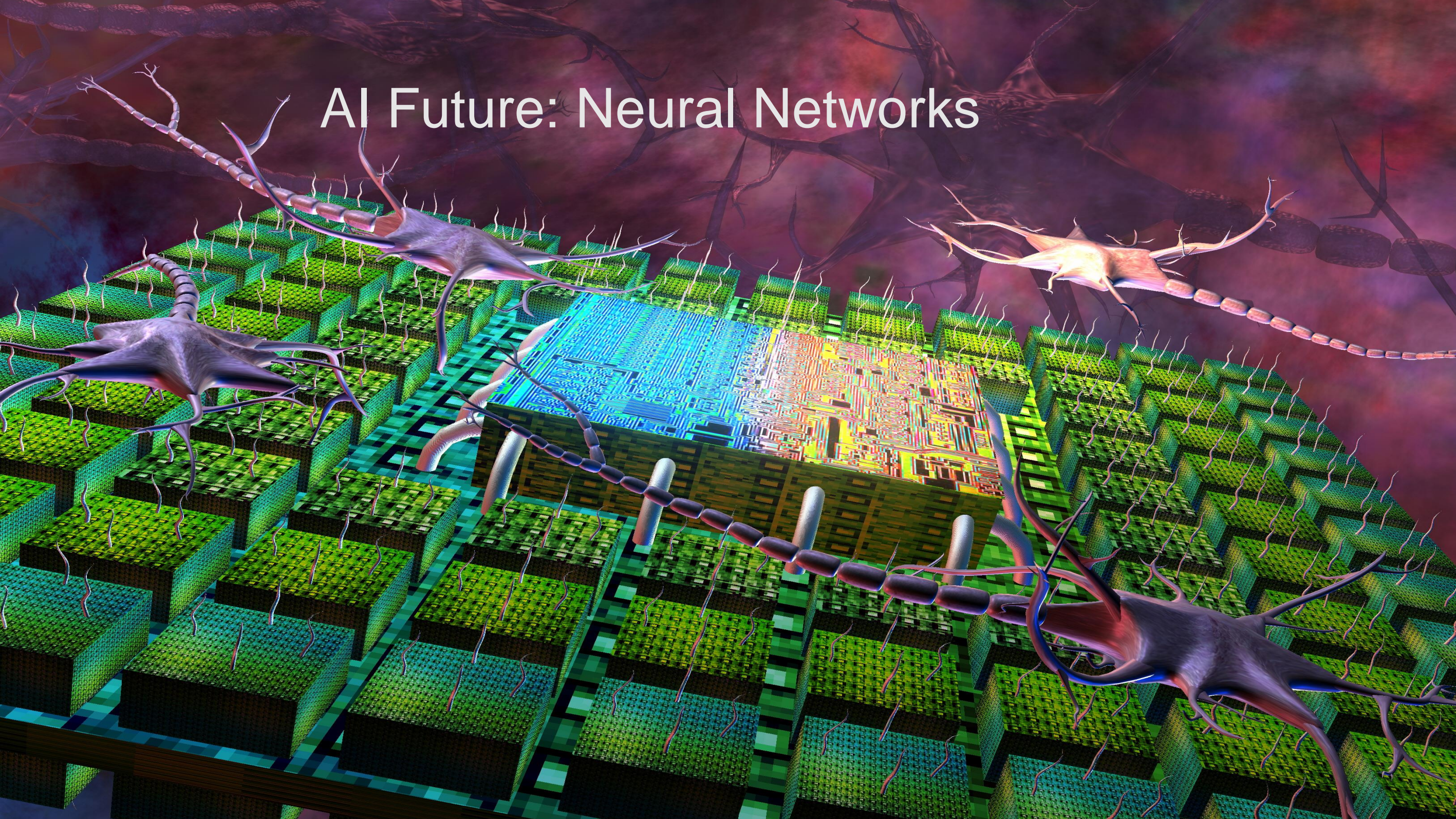


- PDB Viewer
- Proteins
- Protein Morphology
- Loader
- Clear

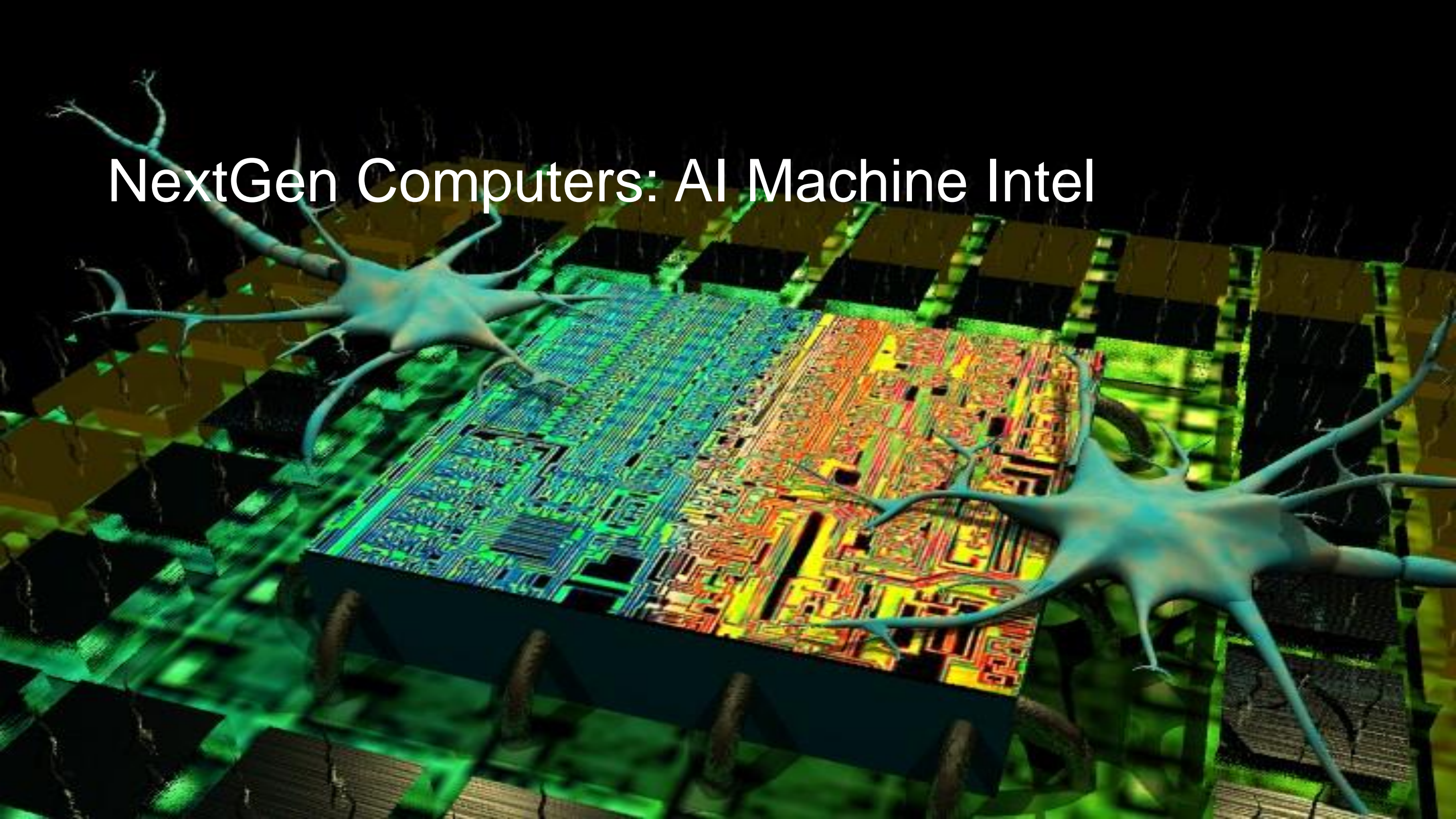
- Open OVERVIEW
- move window
- scale
- navigation
- part manipulation...
- view options
- misc...
- Clip Plane...
- Volume
- Molecule
- PDB Viewer
- VFML

- Proteins
- DNA
- Photosystem\_I
- Cytochrome\_c\_Oxidase
- Collagen
- MHC\_Class\_II
- Potassium\_Channel
- SARS
- Glutamate\_Receptor
- Acetylcholine\_Receptor
- Botulinum\_Toxin
- Thermophilus

# AI Future: Neural Networks



# NextGen Computers: AI Machine Intel

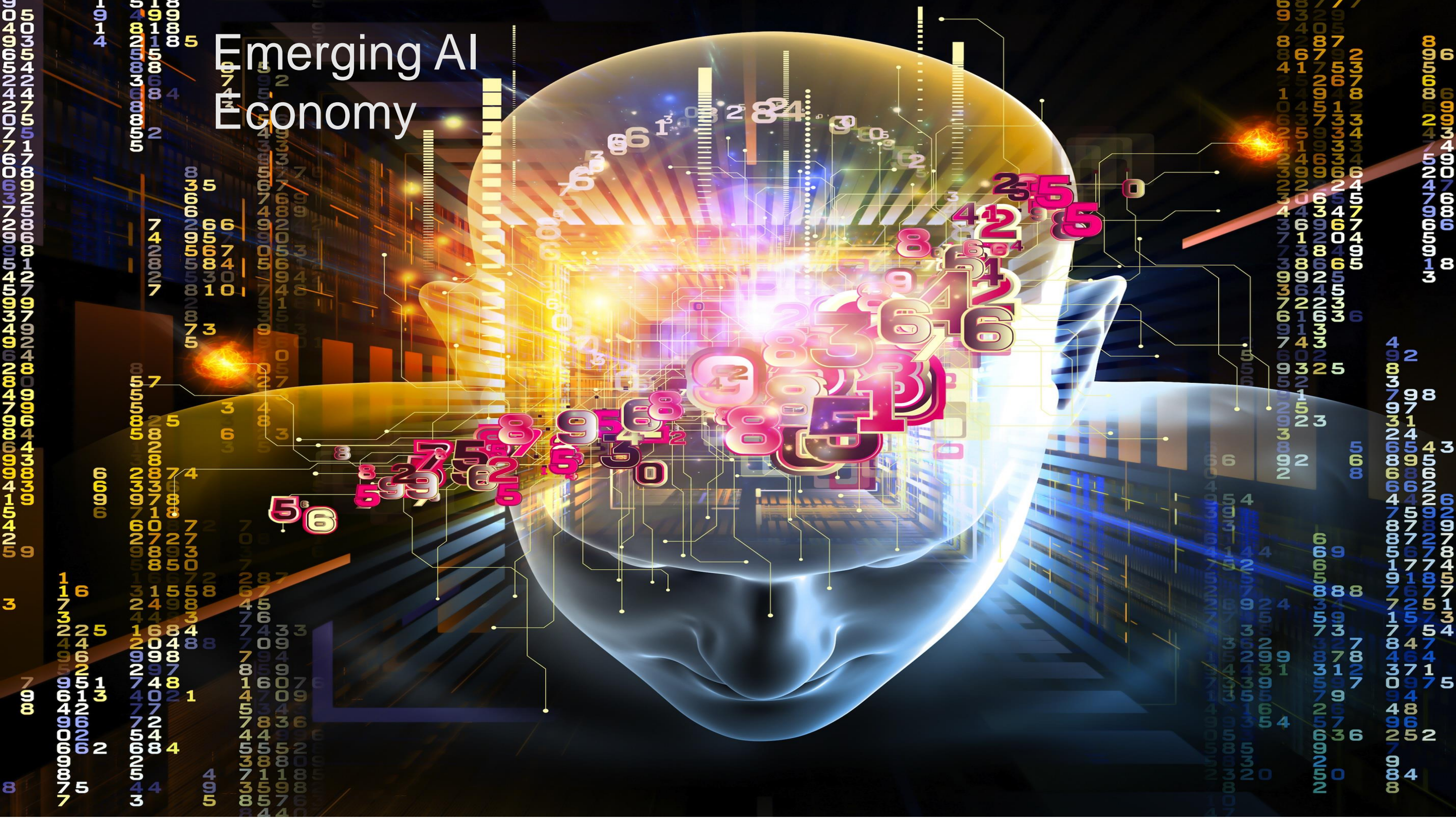


# Robo/AI Convergence

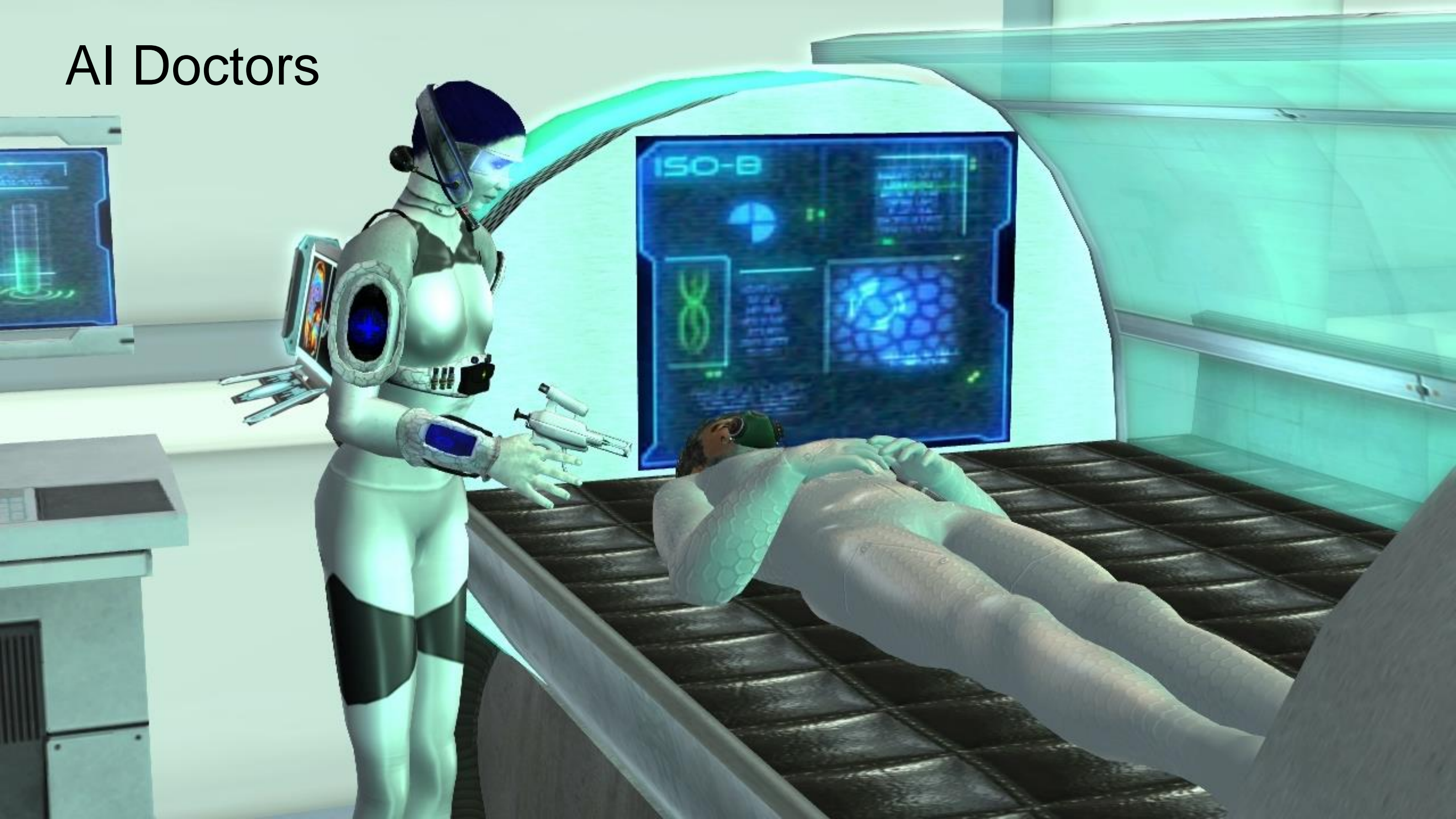




# Emerging AI Economy



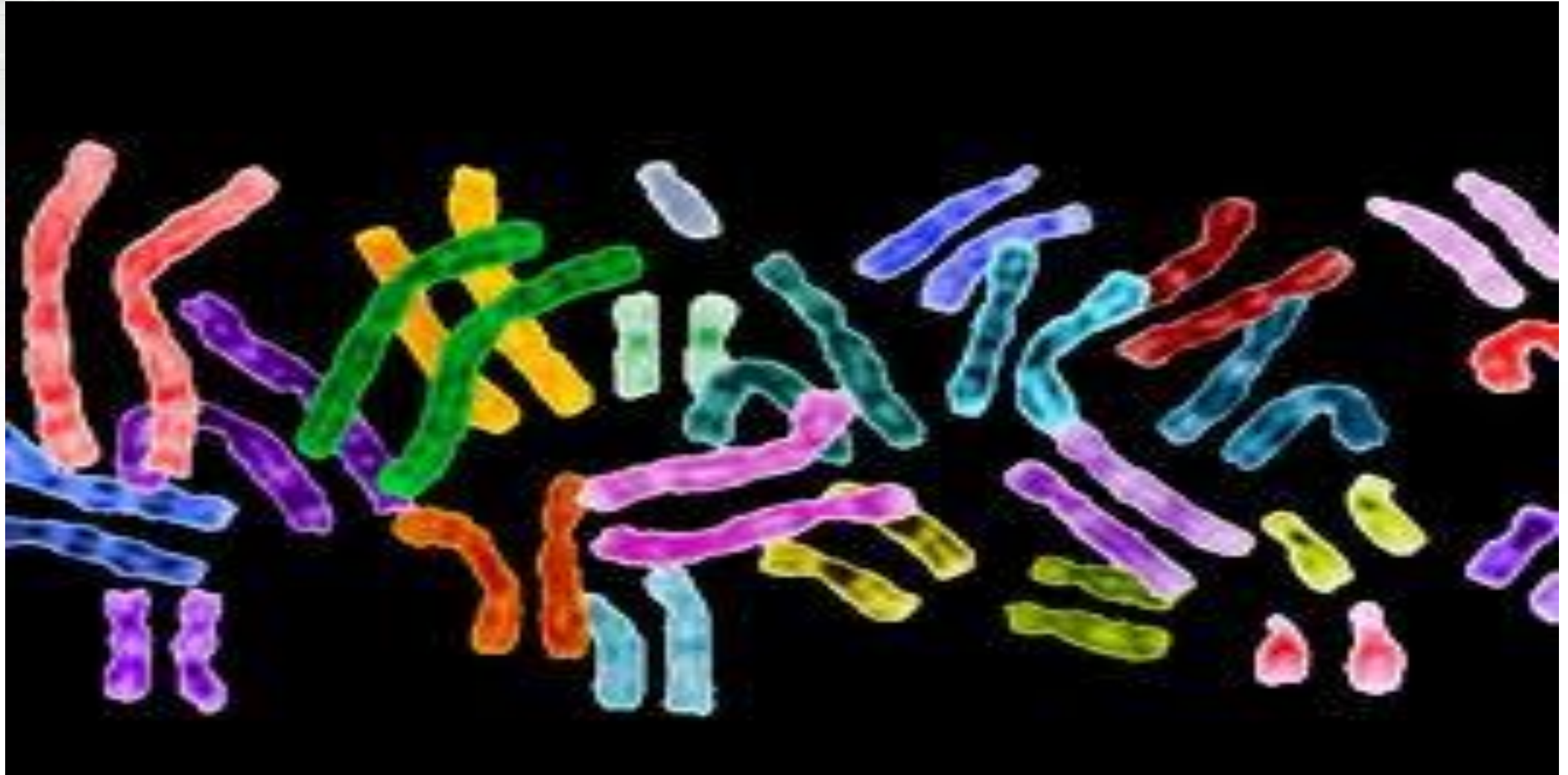
# AI Doctors



Fully  
Autonomous  
Humanoids:  
Social, Biz,  
Service 2025



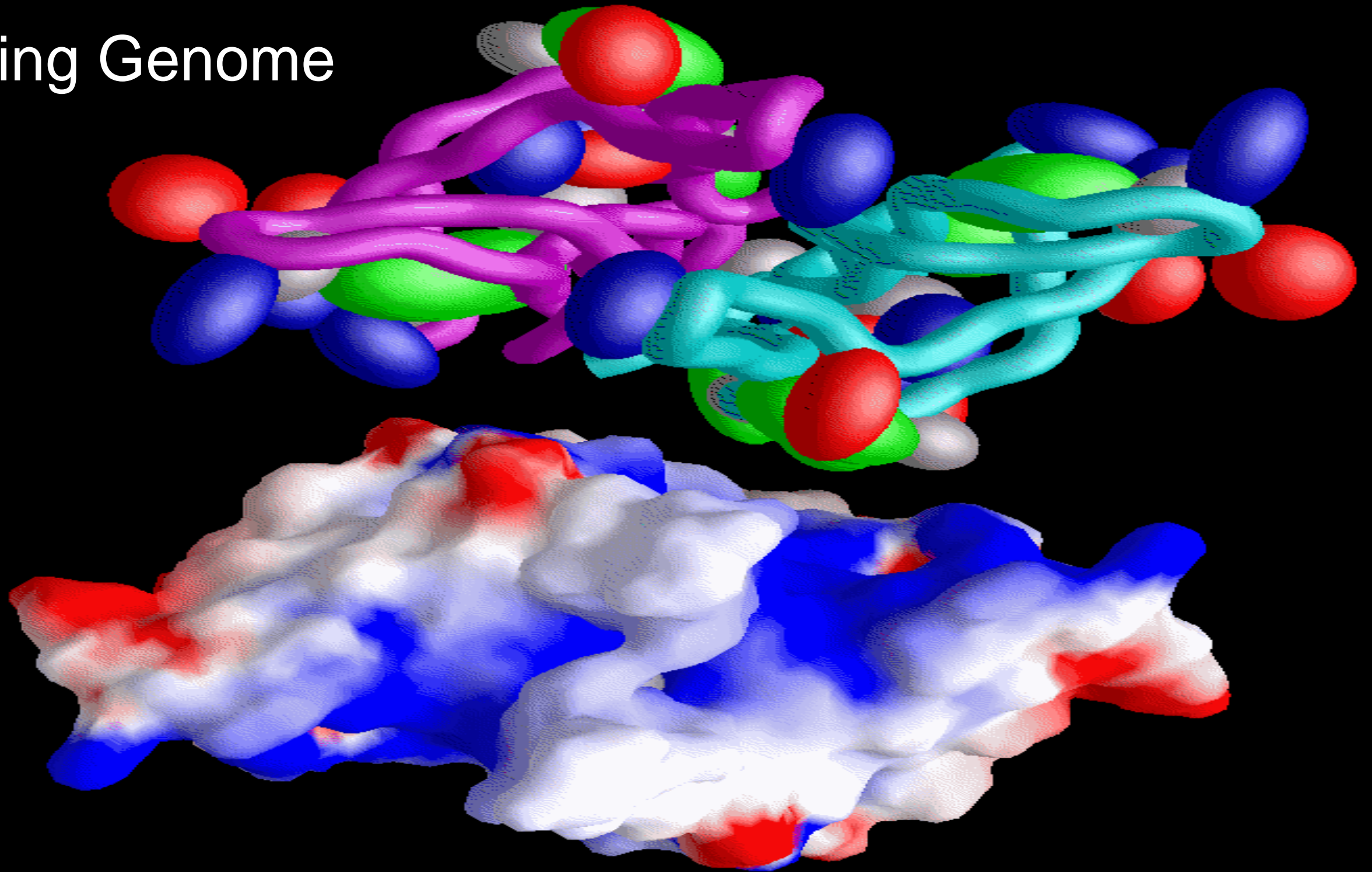
# The End of Medicine



Life Science Transforms Health Care

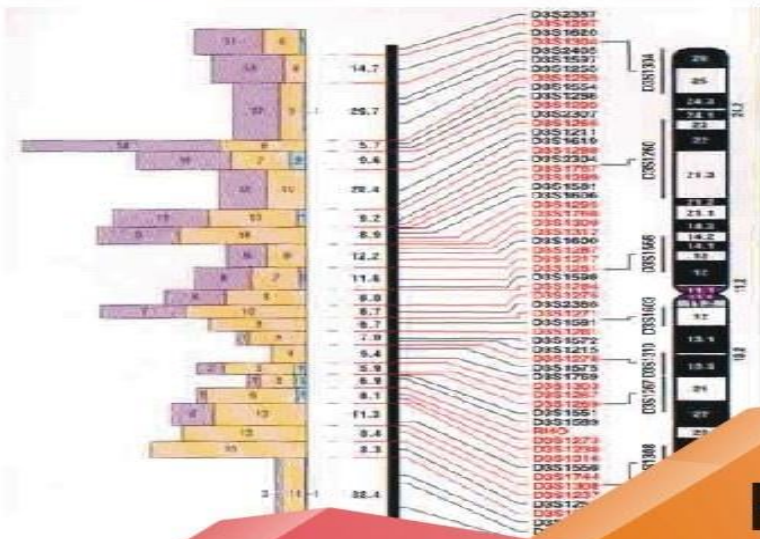


# Hacking Genome



# Future of Healthcare

# 2020 Horizon

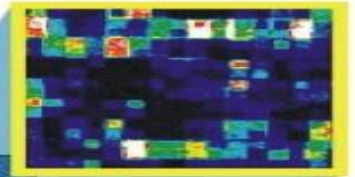


Predictive  
Pharma  
Genomics



Life Extension  
Life Enhancement

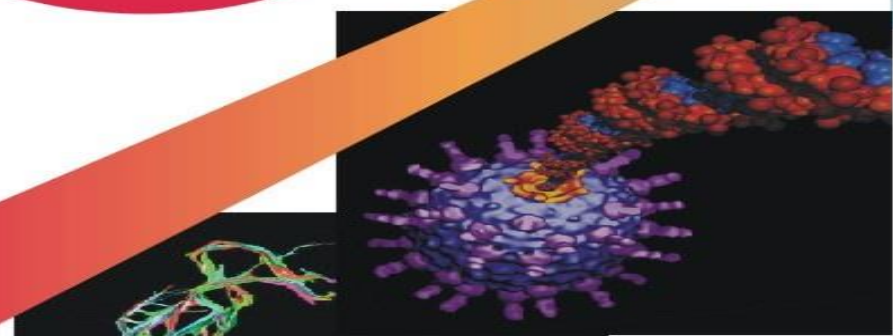
Pre-Birth  
Genetic  
Mapping



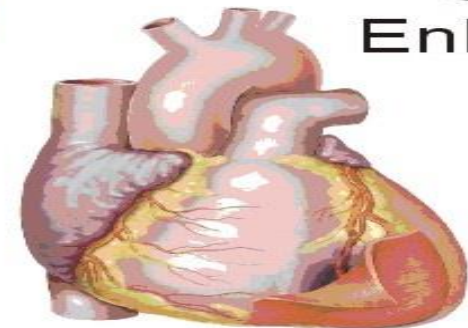
Pre-Emptive  
Regeneration



Neuro  
Cognitive  
Enhancement

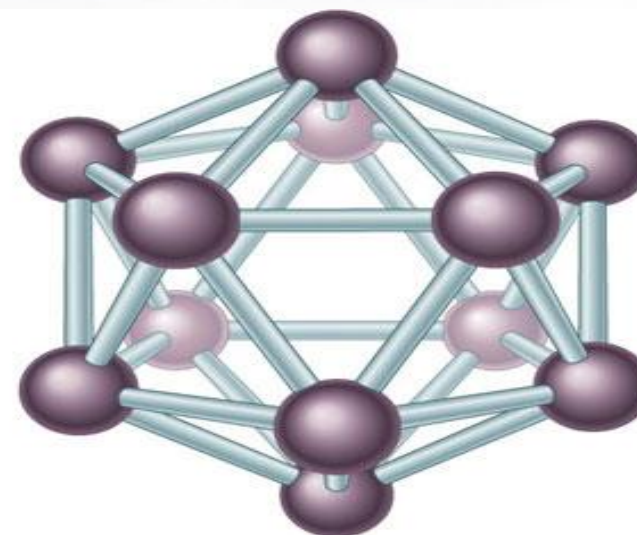
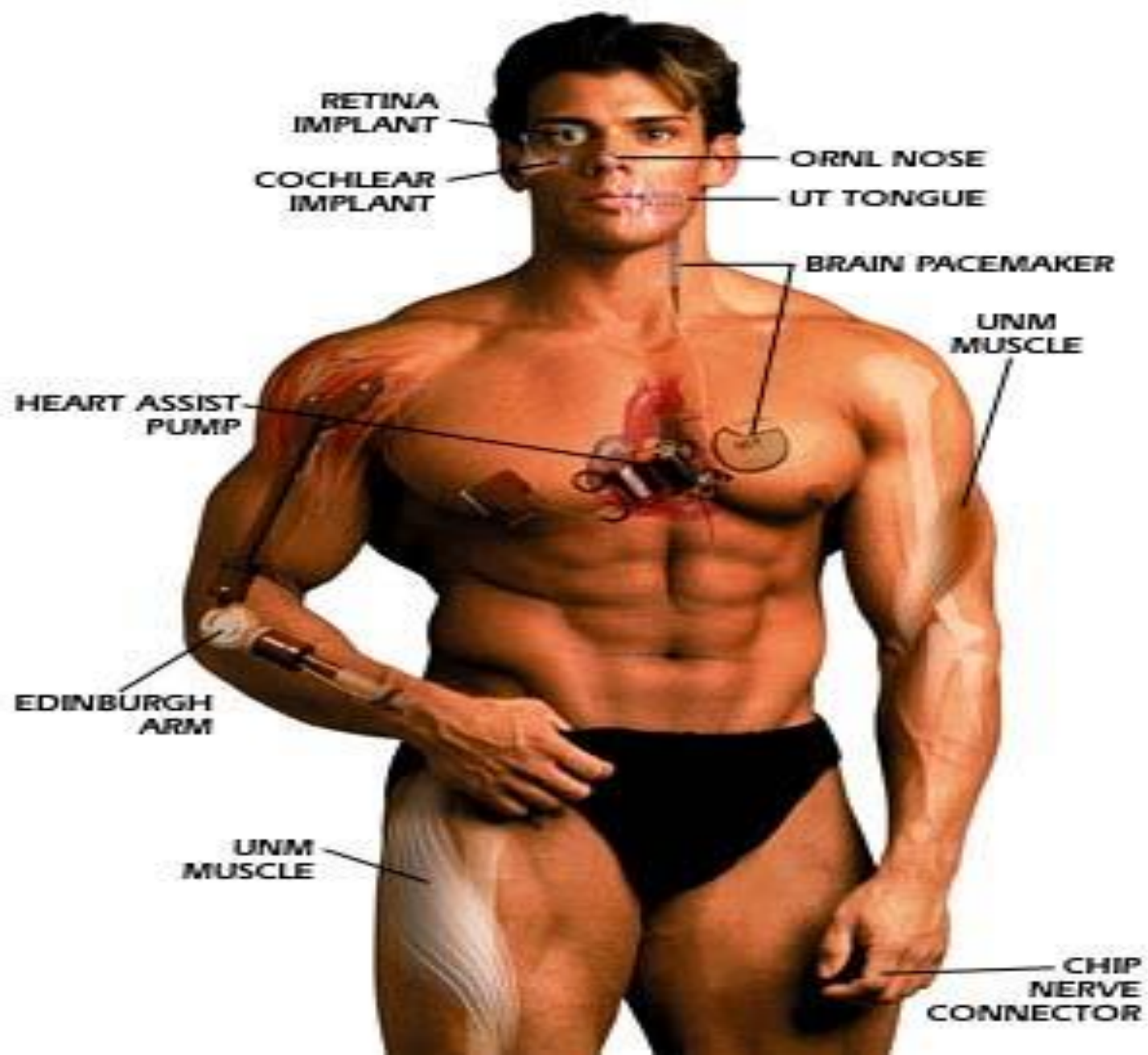


Corrective  
Geno-Pharma



Tissue  
/ Organ  
Optimization

# Life Extension: Personalized Med





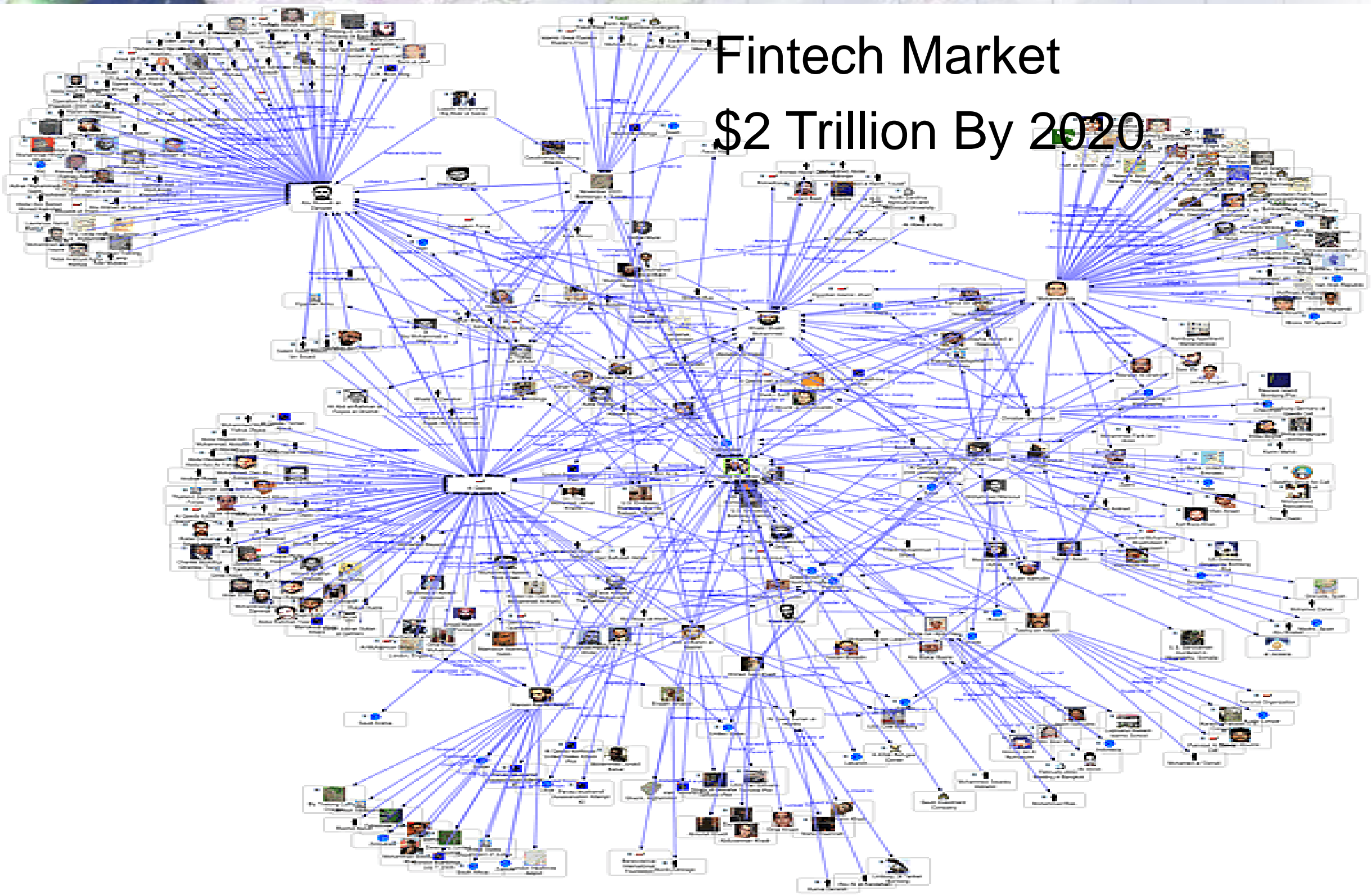
# Mobile Enterprise Intelligence



# The Predictive Enterprise



# Fintech Market \$2 Trillion By 2020



genetics  
solvency II

innovation protection antiselection digitization big data aging population social networking alternative distribution longevity risk innovations

# LIFE INSURANCE


solvency II big data **TRENDS** ageing data safety demanding regulation crossselling risk management biotechnology medical research reputation capital management new technologies medical underwriting microinsurance risk



Managing Tech Disruptions

**HOUSE  
FOR SALE**

*Exclusively*  
**CALL 555-0900**



**SOLD**





1	2	3
4	5	6
7	8	9
*	0	#





# Mobile Knowledge Management





Knowledge Engineering

AI

Mashups

Predictive Analytics Strategy

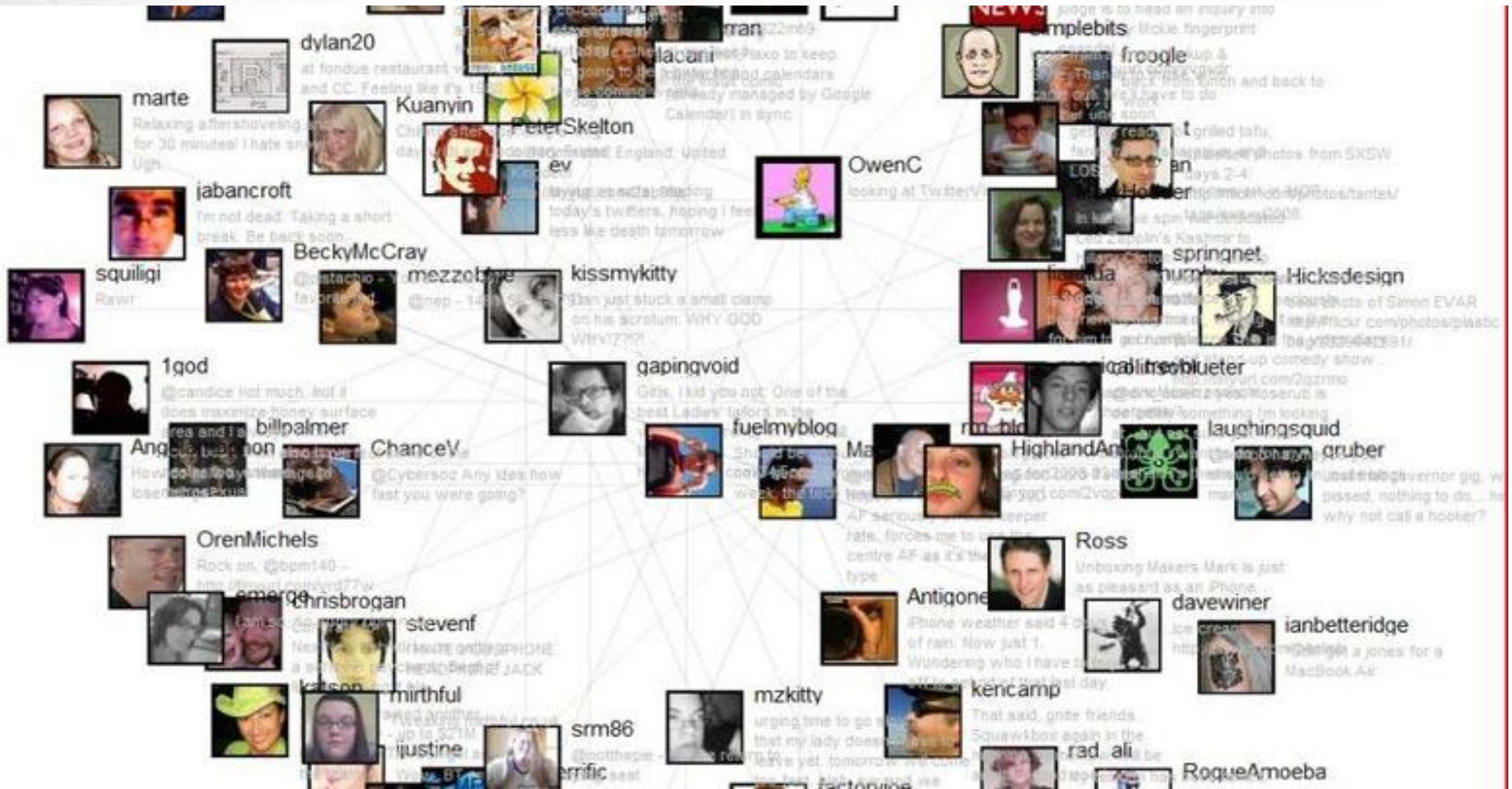
Data Mining

Web 2.0

Mobility

Sensors

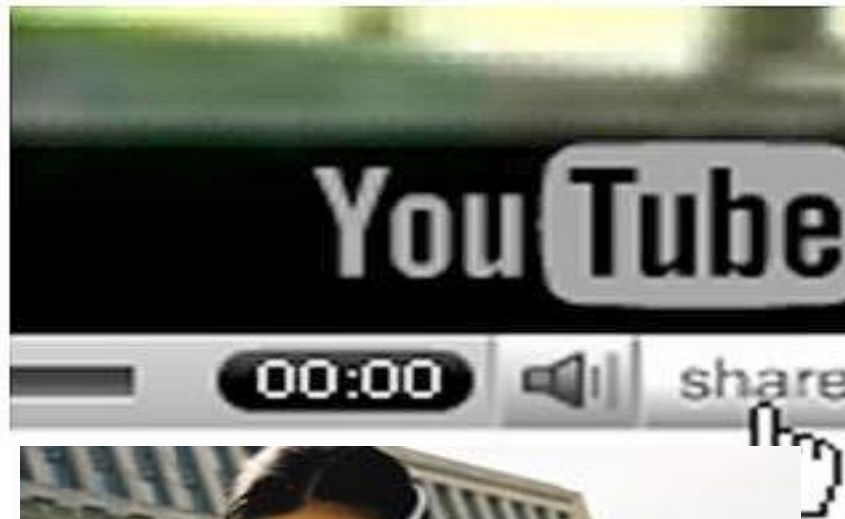
# Connected Economy



We are Connected: Do you get Us?



# Click-Streamers: Digitally Connected





8:20

Monday, September 21



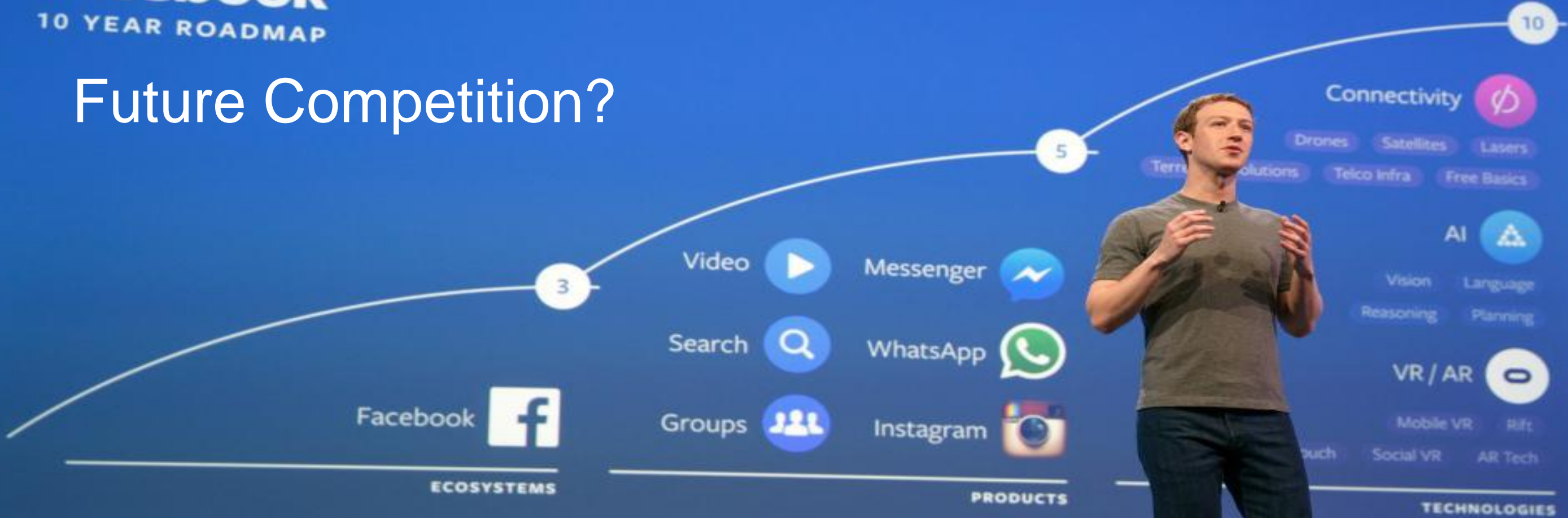
slide to unlock



# BLOCKCHAIN INSURANCE



# Future Competition?

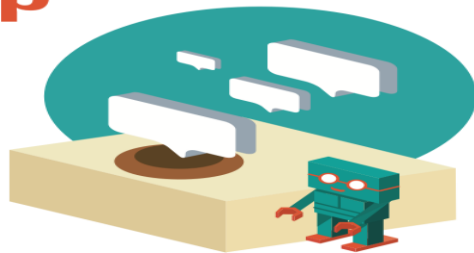




# Everyone's Competition is AI



**Hello!  
I'm a Bot.  
Always  
here  
to help  
you :)**



# Connected Economy





Google

self-driving car





# 3 D Manufacturing Economy





# GlobalFuturist.com

---



Thank You  
Jcanton@futureguru.com



**Watson**



# Autonomous Robots





# International New York Times

VW denies it broke law on emissions in Europe



A deadly deployment, an officer's despair

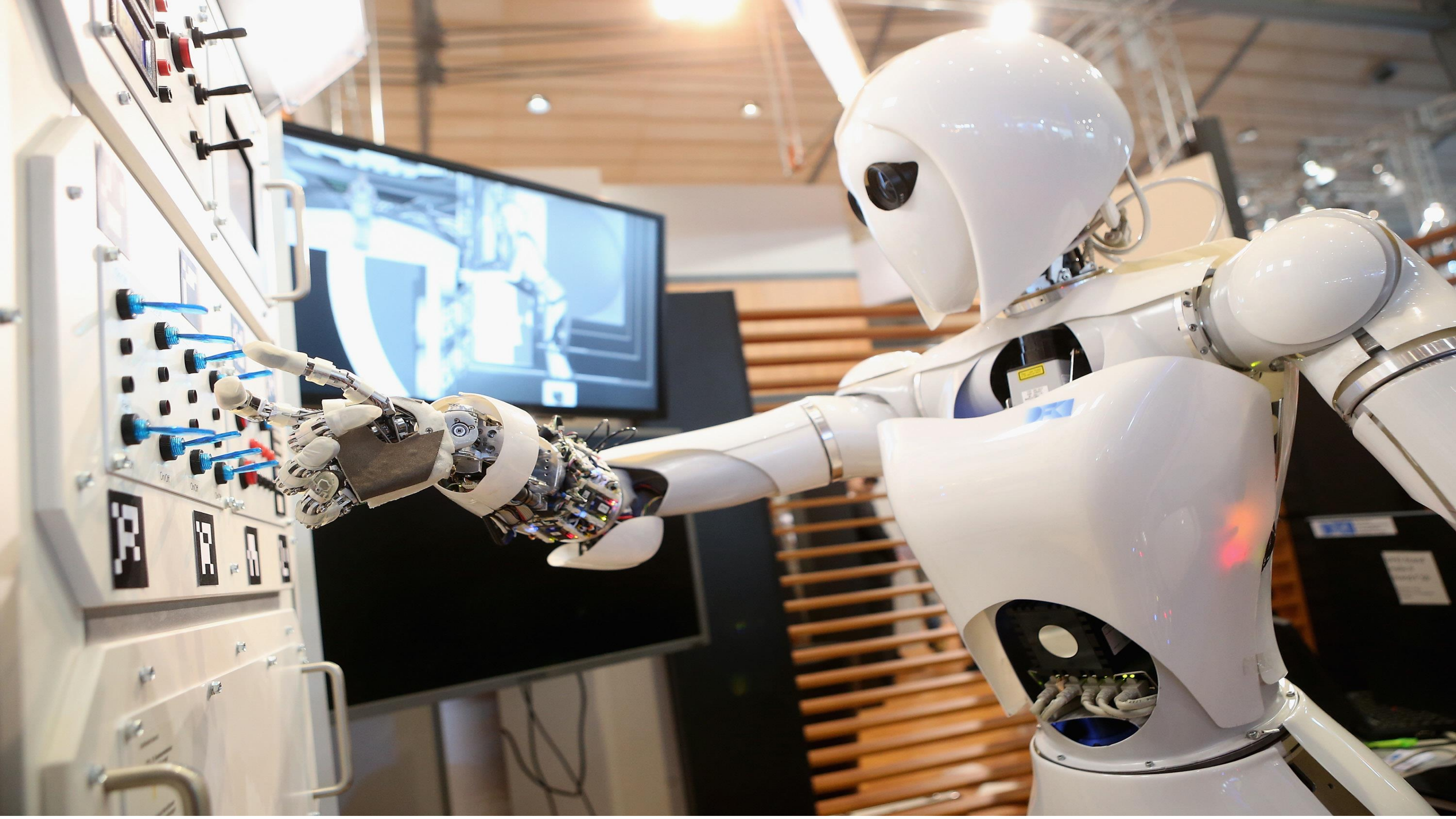
Taliban kill 22 in assault at Pakistani university

**DRC**  
**Hubo**

KAIST

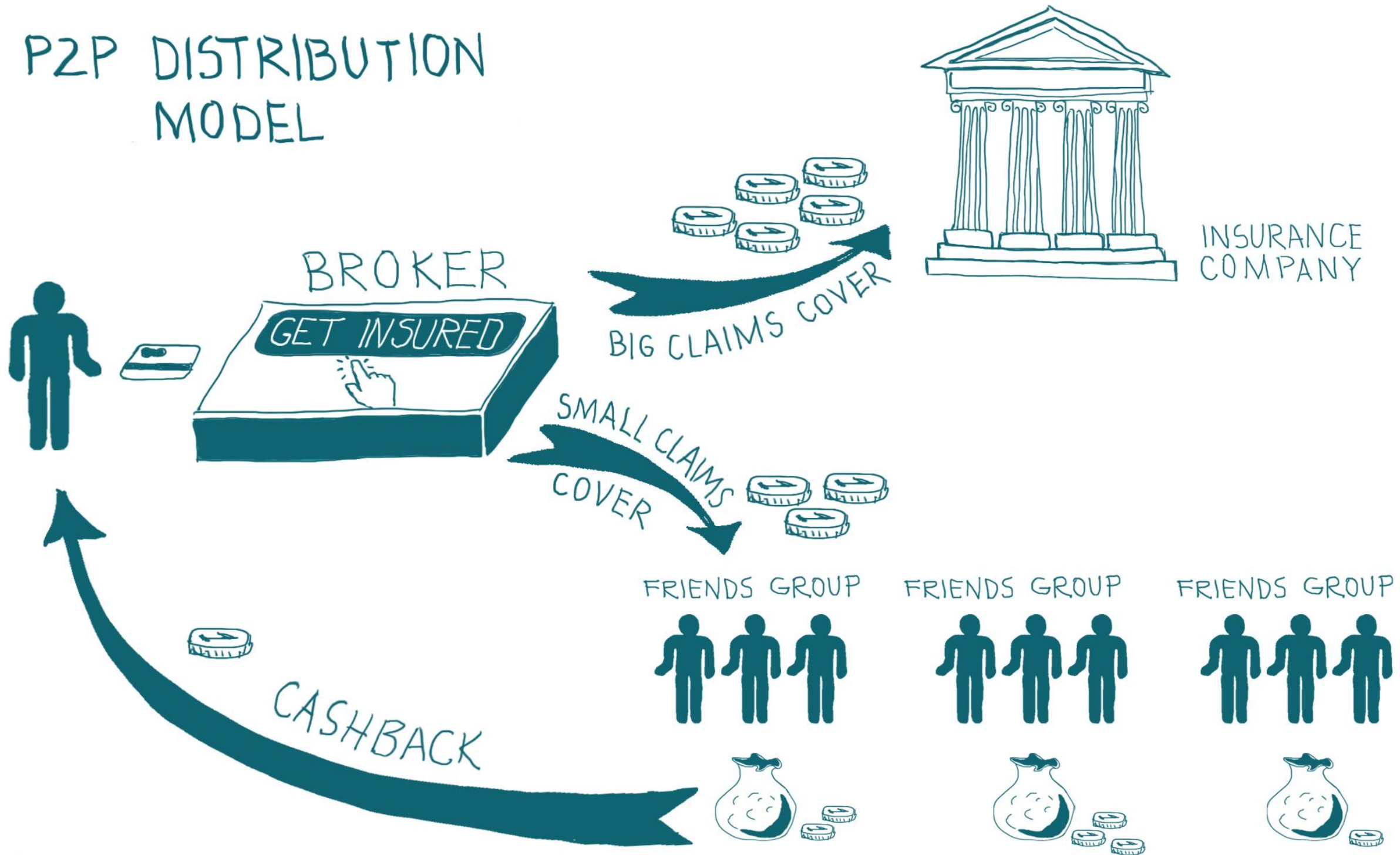
KAERI  
CIRI

max



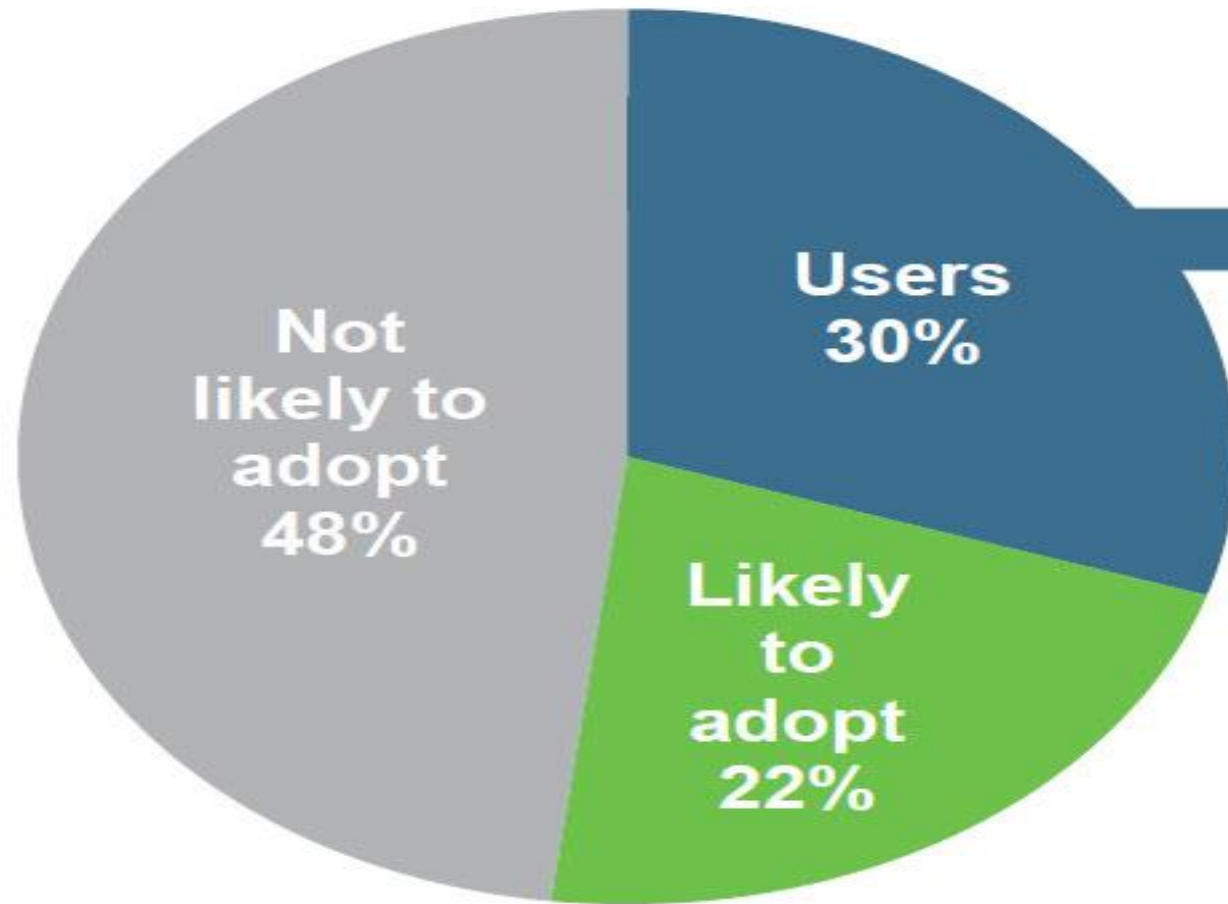


# P2P DISTRIBUTION MODEL



# Smarter AI Drives Robo-Advice Trend

## ROBO-ADVISOR MARKET: USAGE AND LIKELY ADOPTION AMONG AFFLUENT INVESTORS



- Age 50 and younger
- Lower asset levels
- Working full-time for pay
- Business owners

Base: Affluent investors

Source: Market Strategies International. Cogent Reports™. Investor Brandscape®. September 2015.

# FinTech Advisor of the Future: Trends

1. Better Predictive Tools: Manage Uncertainty
2. Changing MultiGen Clients: Affluent Clickstreamers



# 5 Future cyber risk trends

- Cyber insurance market could be worth \$20bn+ by 2025

- Liability and data protection risks dominate market today but demand for, and take-up of, business interruption cover will grow over next decade

- Businesses will be increasingly exposed to – and focused on – supply chain cyber risk

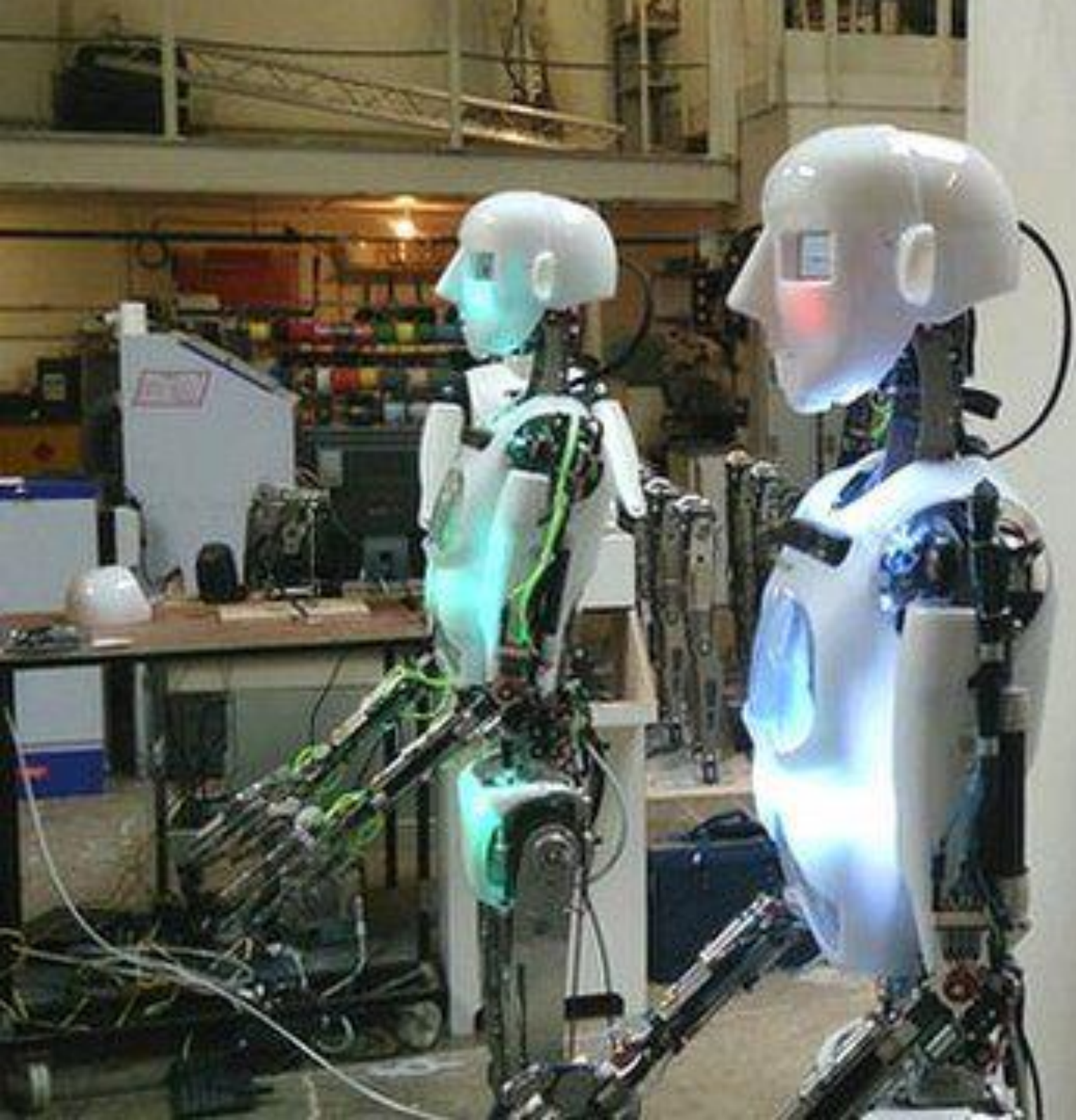
- Financial institutions, energy, utility, transport and telecommunications sectors to lead widening demand for cover

- A catastrophic cyber loss is increasingly likely. Governments, businesses and insurers will need to collaborate to protect critical infrastructure



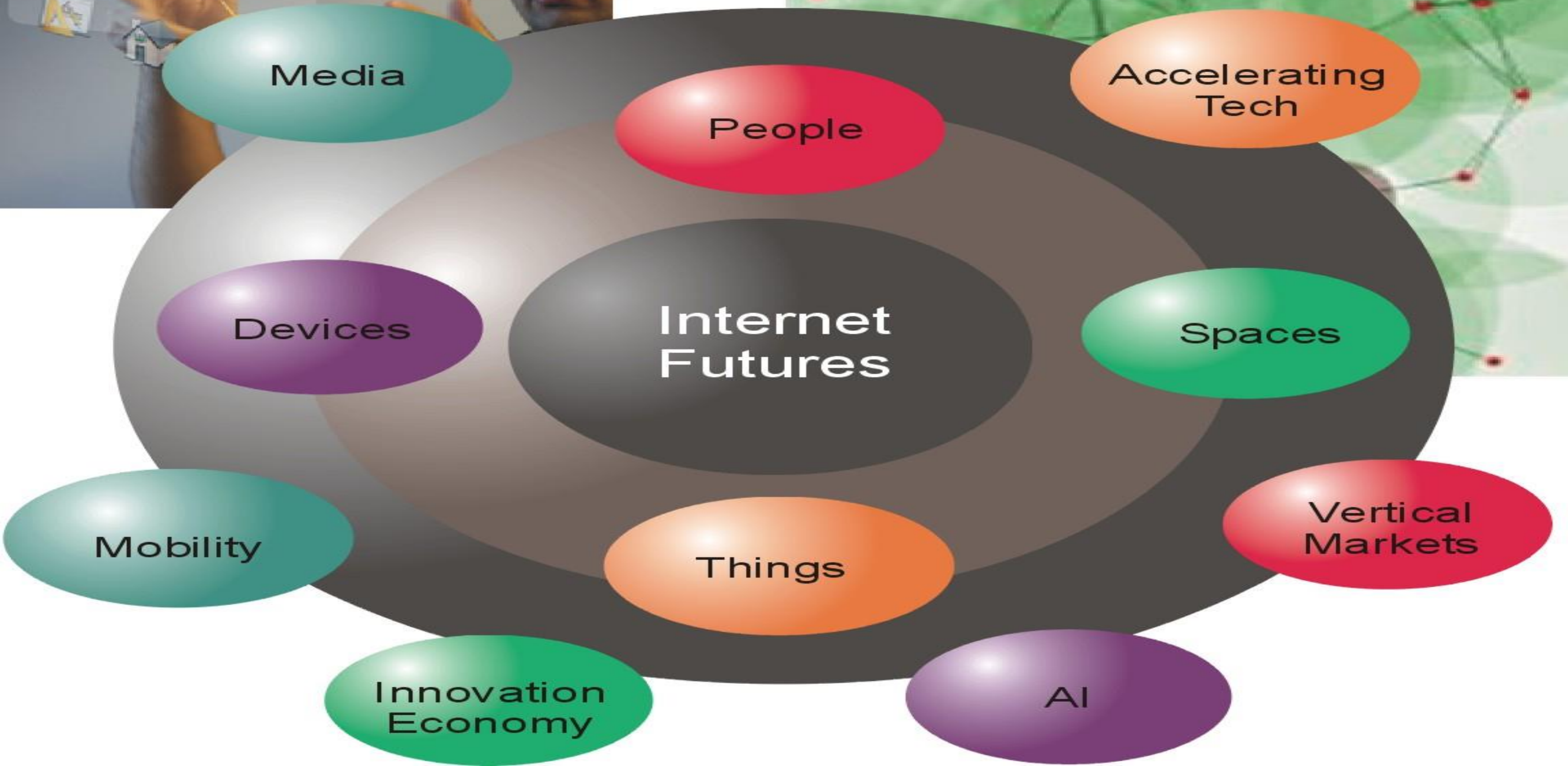
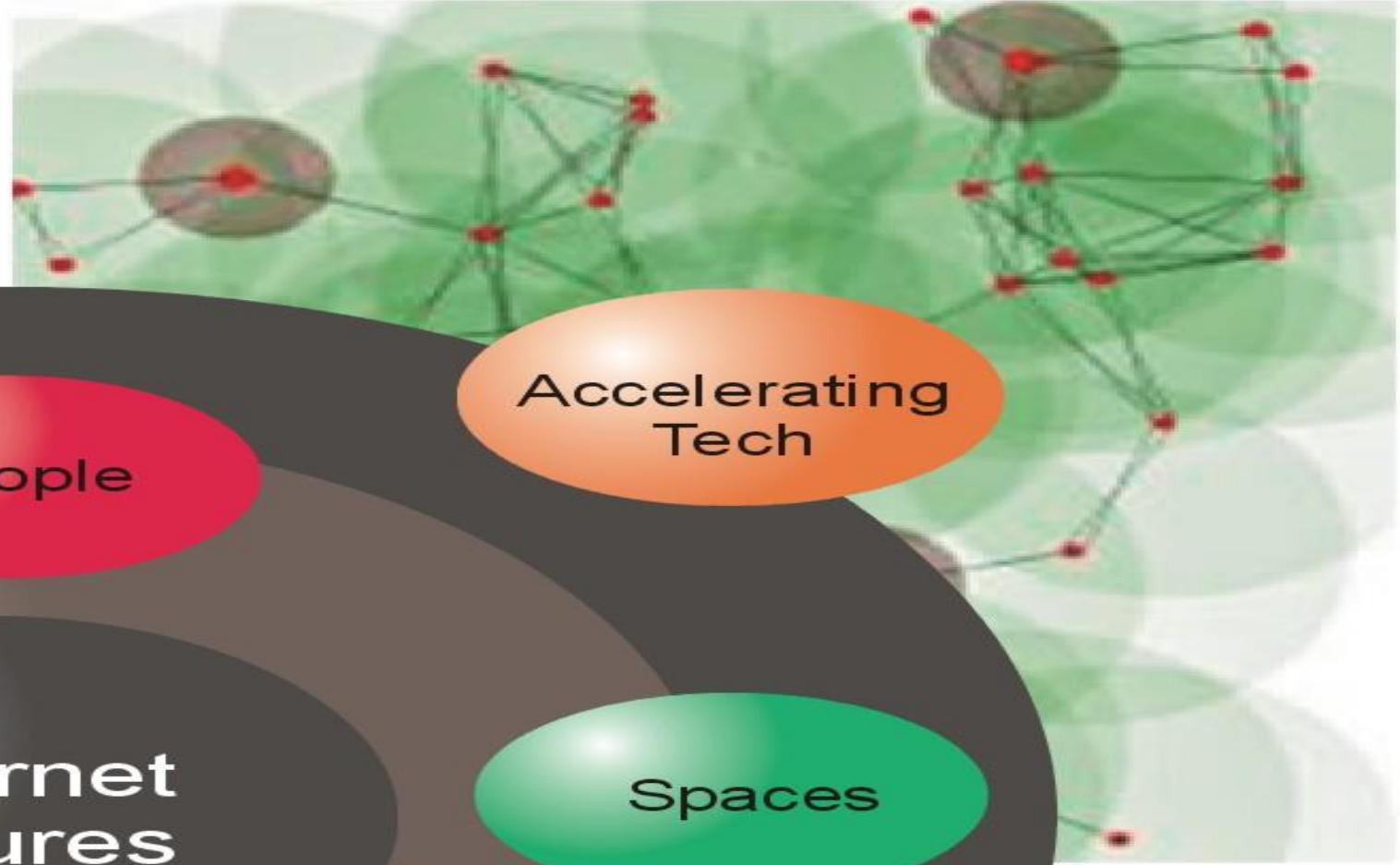
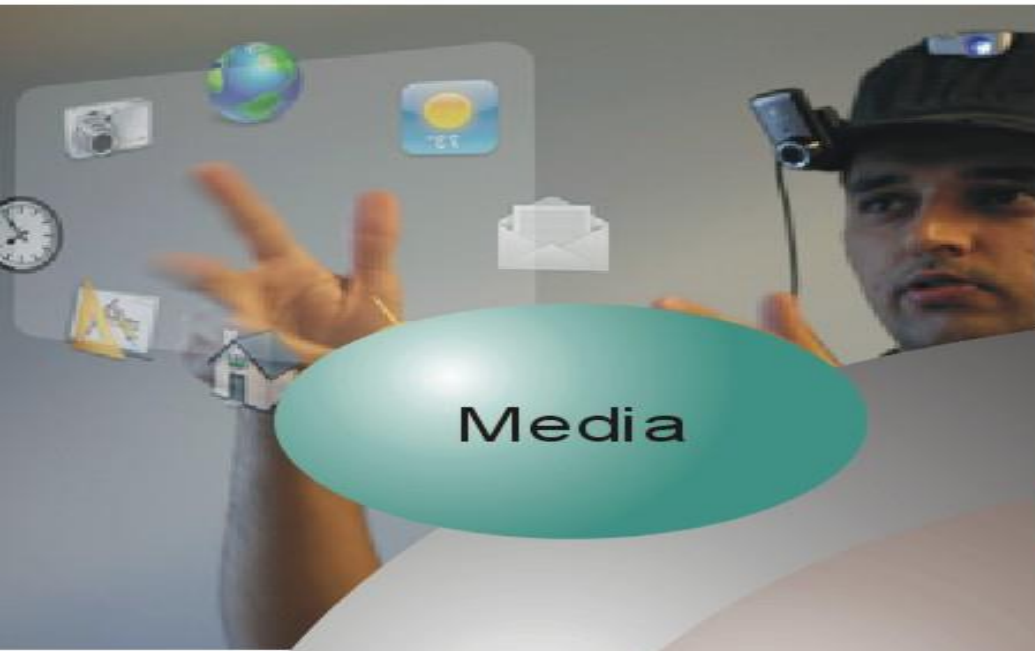






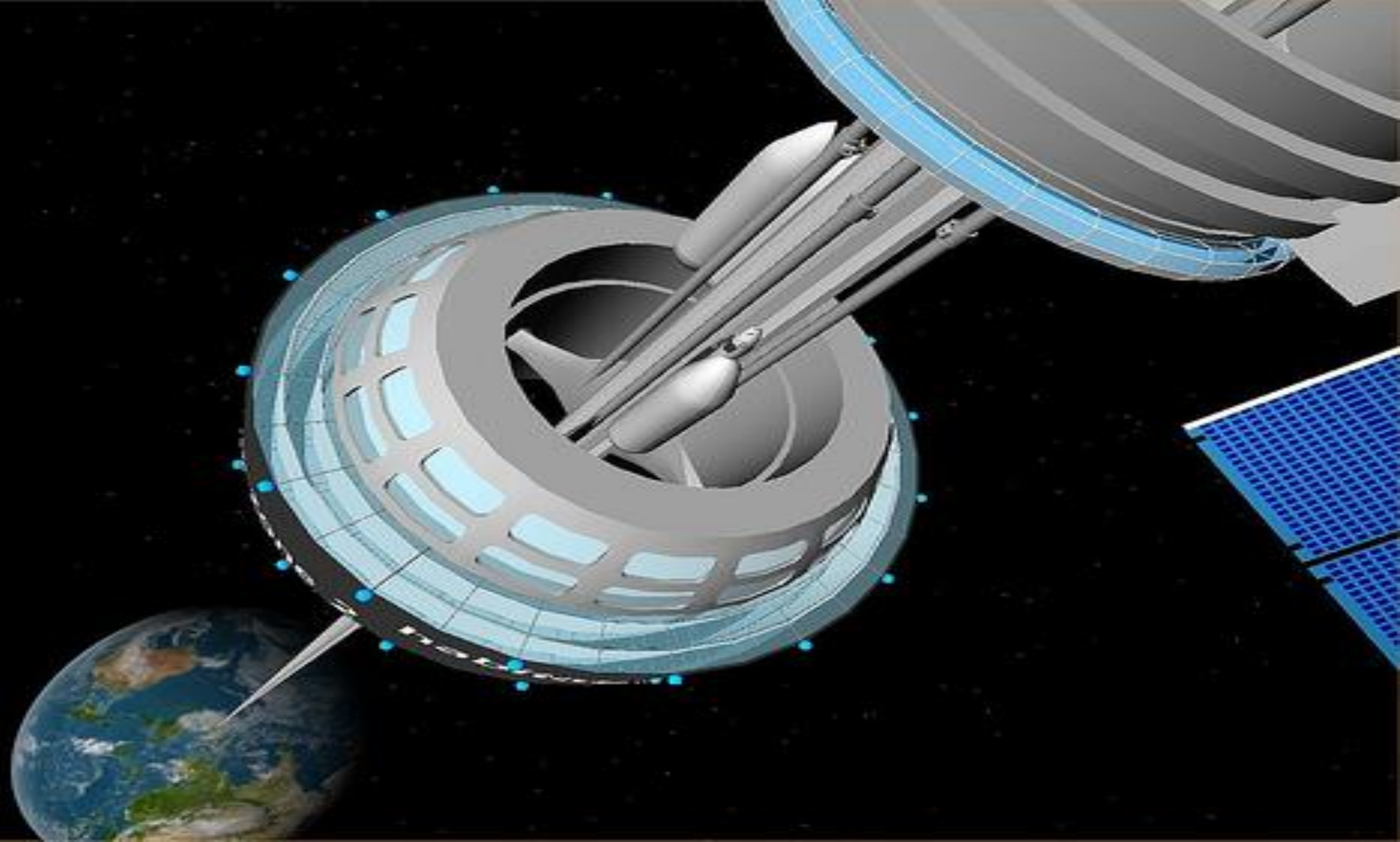
# Oncology Advisor



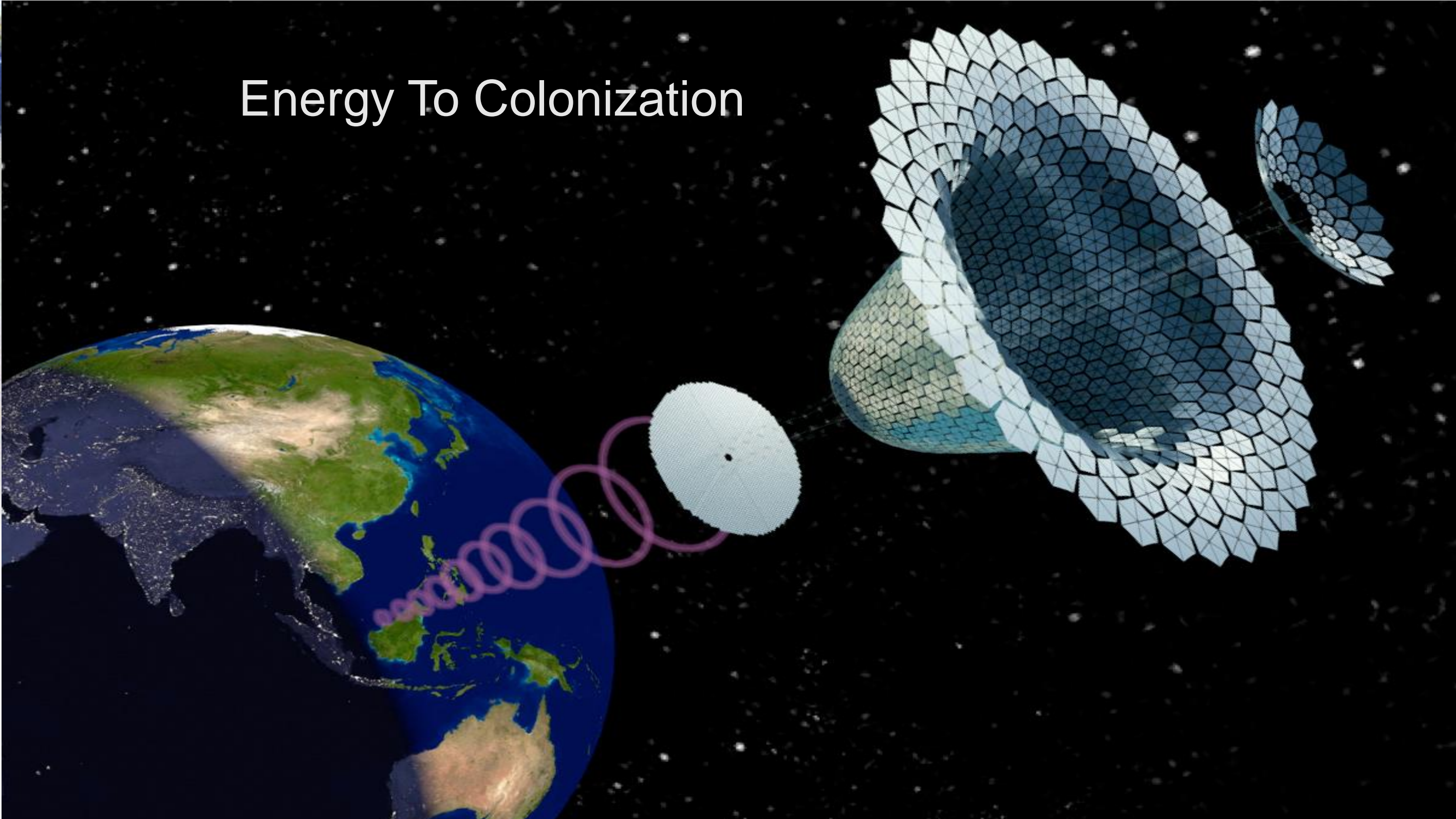


# Space Insurance Market





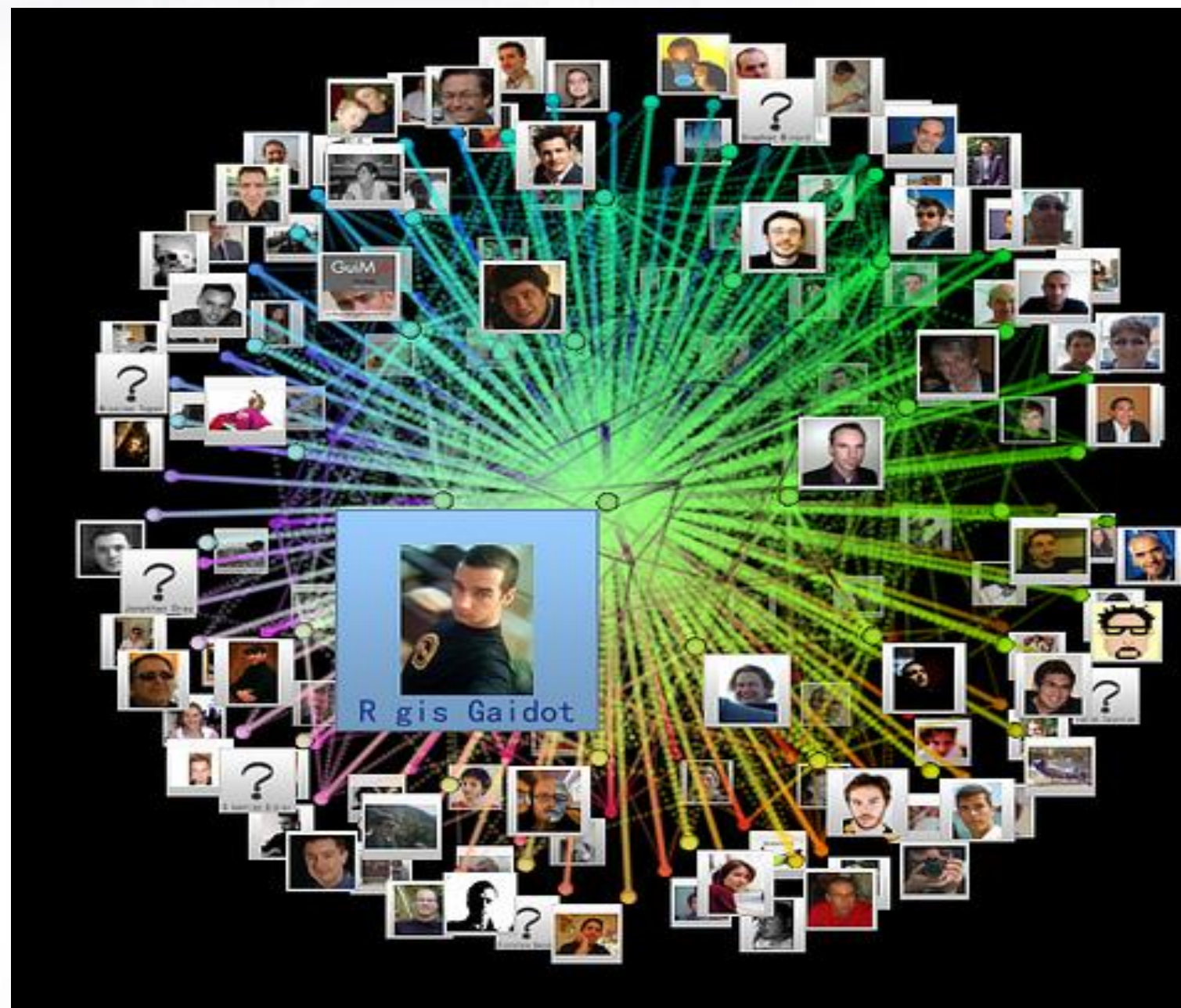
# Energy To Colonization





# Future of Biz: Connected Economy

- IoT/AI Ready
- Innovation Culture
- Hyper-Competition
- Mobile Everything
- Agility as Norm



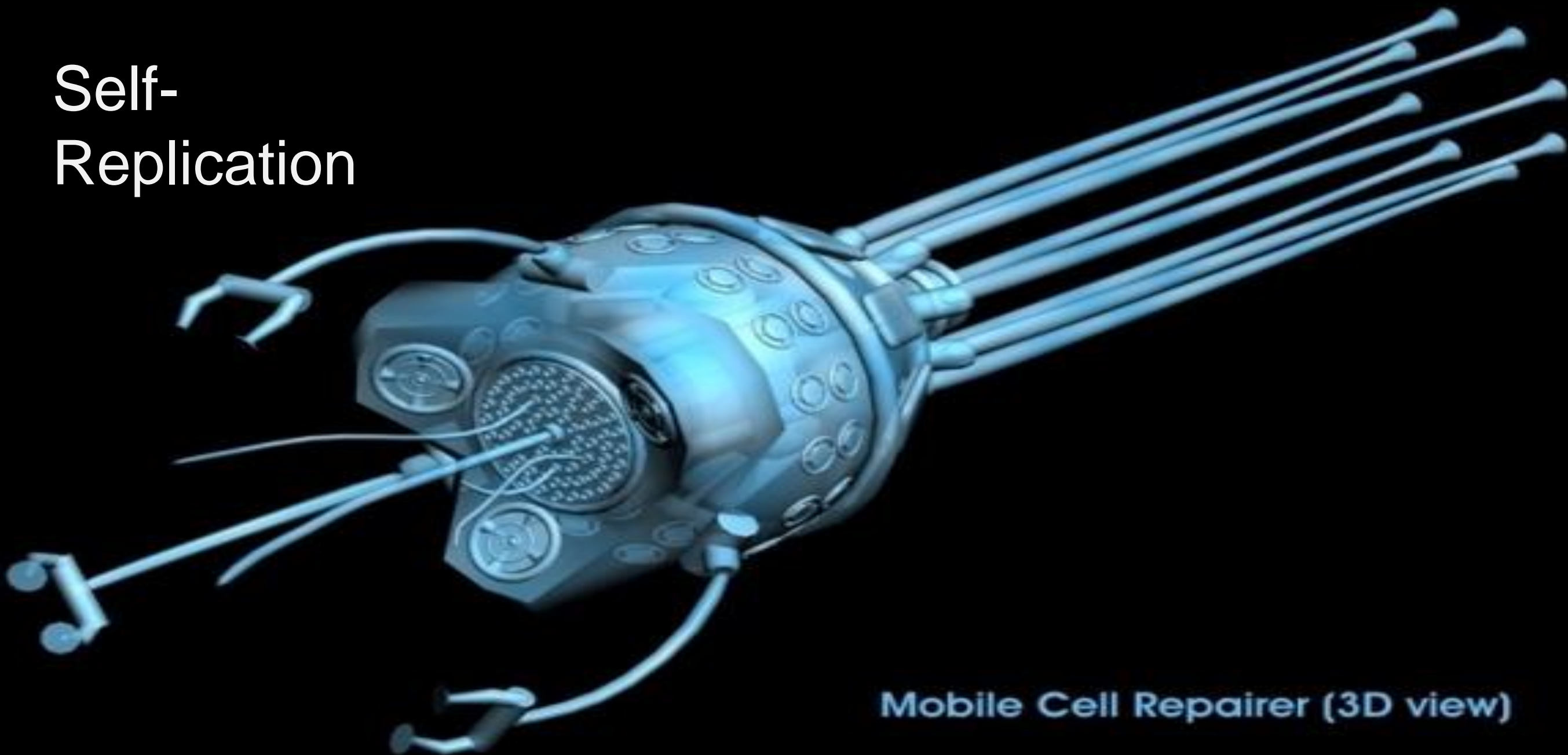
# BIOHACKING

IS THE ART AND SCIENCE

of optimizing your body, mind, and performance with systems thinking; biology and technology.



# Self-Replication



Mobile Cell Repairer (3D view)

Image courtesy of Nanotechnology News Network  
Author: analyst Svidinenko Yuriy