



TRANSTECH

TRANSFORMATIVE TECHNOLOGY CONFERENCE

BUILDING THE FUTURE OF
HUMAN POSSIBILITY

NOVEMBER 15-16 2019 | PALO ALTO, CA



TRANSFORMATIVE TECH:

The Future of **Work, Society,
and **Tech** depends on the state of
the **Human Mind.****

A person wearing a hat and a long-sleeved shirt is sitting on a rocky cliff, looking out over a vast, hazy landscape. The sky is a mix of orange, pink, and blue, suggesting a sunset or sunrise. The foreground is filled with trees and rocks, and the background shows rolling hills and a valley. The overall mood is contemplative and serene.

“How do we enable every human to develop the cognitive and emotional ability to express their full potential?”

TRANSFORMATIVE
TECHNOLOGIES
support



mental
health



emotional
wellbeing



human
thriving

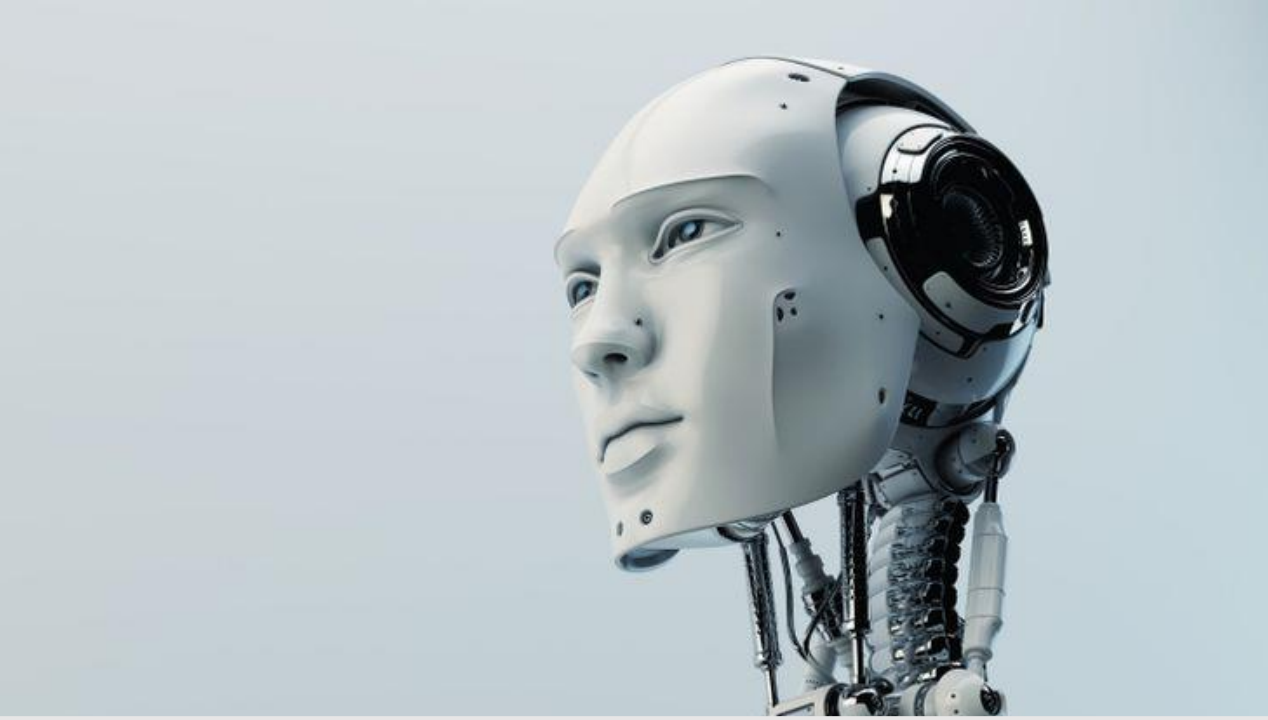
We can create an
unprecedented
era of human
flourishing.



We can now embrace
and encourage
psychological
wellbeing.



Emerging technologies are now here, we just have to point them in a new direction.



The new jobs will be defined by human interaction, problem solving, & creativity, for which social emotional skills are vital.

800MN Jobs Gone
by 2030

McKinsey 2017 Report

46% of All Tasks of All Jobs
Eliminated

<https://qz.com/1090176/how-to-think-about-job-automation-studies/>

Today, learning social-emotional skills and self-awareness = Luck.



Success is
not a given
and...
time is
running out.



Outdated
Educational System



Stagnant, Siloed
Medical System



Cognition
Crisis



Outclassed
Biological System



Compromised
Attention



Rising Stress, Anxiety, and
Depression

Building the tech we
really need must
become the shared
mission of
many.



A man and a woman, both wearing denim shirts, are smiling and looking at each other. They are pointing their index fingers towards each other's hands. The background is dark with a faint, glowing network of white lines and dots. The text is overlaid in the bottom left corner.

Remember: We design it.
We can design it to get us here,
to keep **human contact central**, to **prioritize connection**.

We build what we are.
Are you willing to join
this shared mission?
To be who you
need to be?





**Success for humanity depends on you.
This is the great work of our time.**

WHY NOW?

NEED

**RISING
ECONOMIC &
SOCIAL COSTS**

DEMAND

**CONSUMER
BEHAVIOR &
SOCIAL TRENDS**

MEANS

**EXPONENTIAL
TECHNOLOGY &
MEDICAL
INNOVATION**


A New Era of Human Flourishing

THE HUMAN WELLBEING MARKET OPPORTUNITY

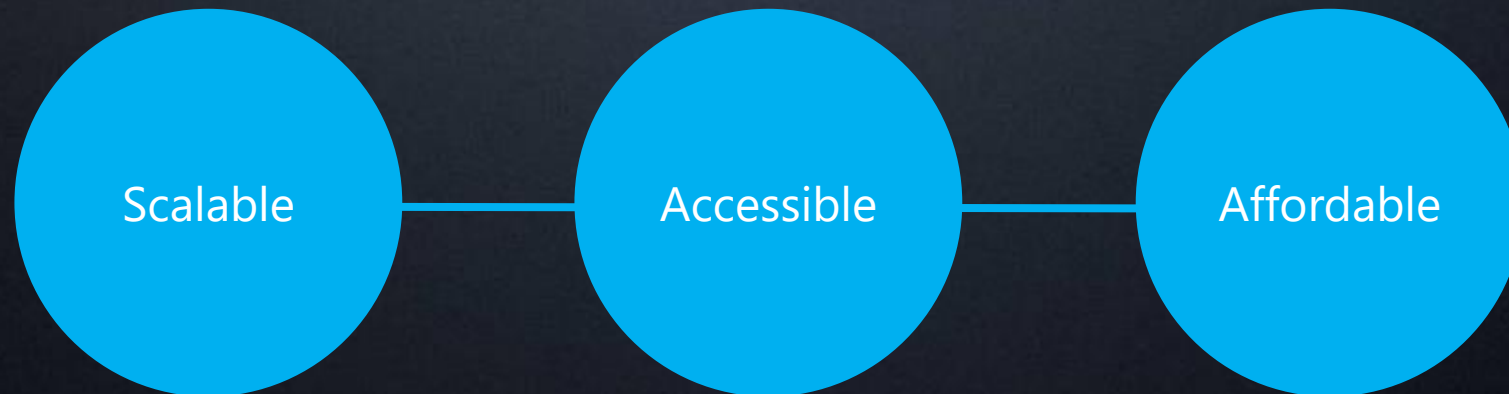
- Massive, growing markets, \$3.7TN WW, 10.6% CAGR and growing
- Transformative Tech disrupts several \$100BN industries, creates new markets
- Market includes every human mind



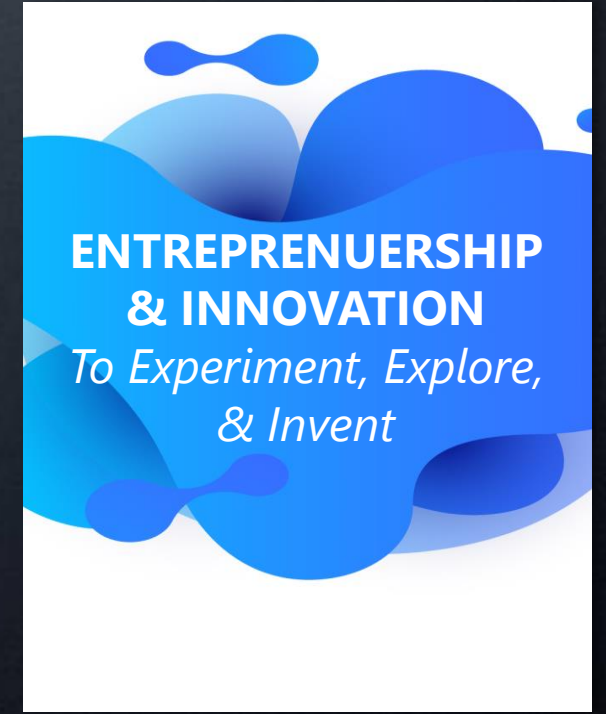
Technology is that force

Which takes something scarce  **ABUNDANT**

MENTAL HEALTH | EMOTIONAL WELLBEING | HUMAN THRIVING



We serve Transformative Tech Entrepreneurs, Innovators, and Investors



To Find Feedback, Funding, and Friends.

OUR GOAL

**TO ELEVATE
THE HUMAN MIND**

BY 2030

1.0BN

BY 2050

2.0BN



TECH & MASLOW'S HIERARCHY OF NEEDS

TRADITIONAL
TECH

Physiological Needs
breathing. food.
water. shelter. clothing. sleep

Safety And Security
health. property.
family and social stability

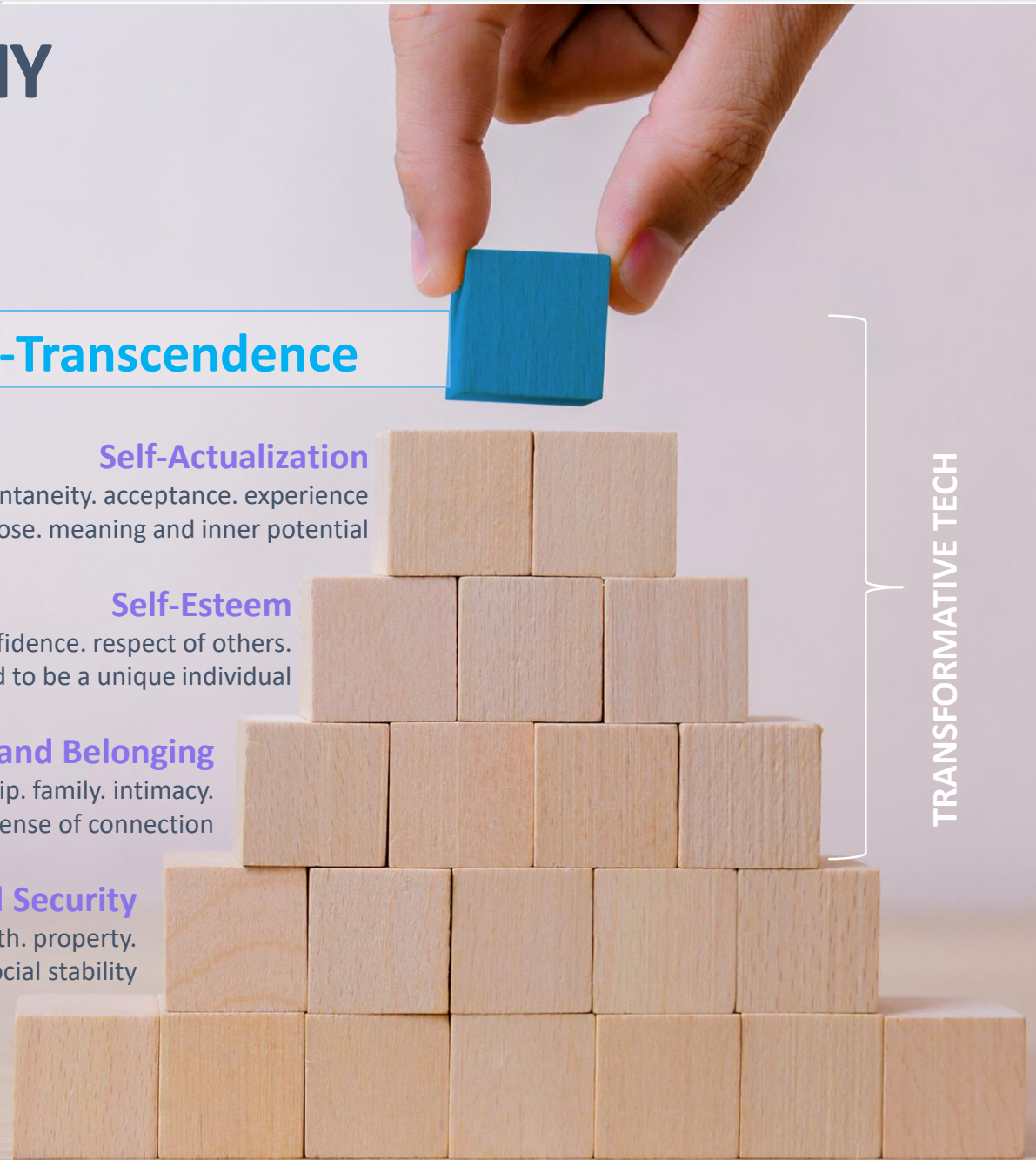
Love and Belonging
friendship. family. intimacy.
sense of connection

Self-Esteem
confidence. respect of others.
the need to be a unique individual

Self-Actualization
morality. creativity. spontaneity. acceptance. experience
purpose. meaning and inner potential

Self-Transcendence

TRANSFORMATIVE TECH



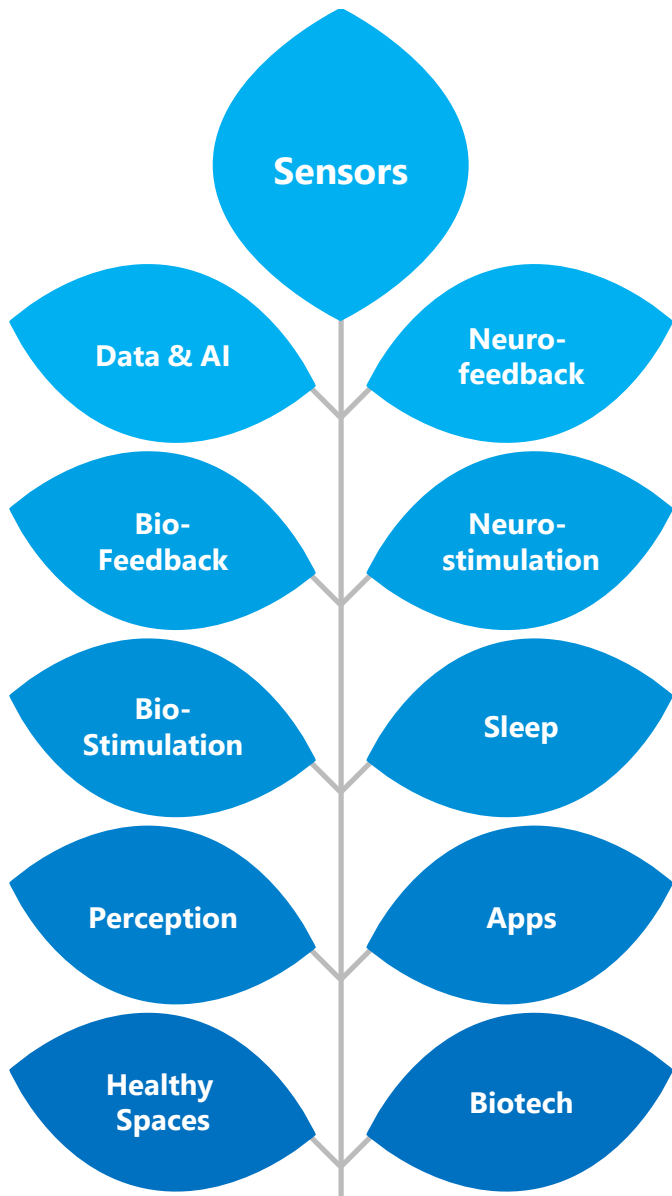
Because we're living longer, our focus is starting to **shift toward wellbeing.**

– Bill Gates



“I need my people to envision things that **no one has thought of yet**, and for that to happen, I have to **help them access the best, most creative part of themselves.**”

– Fortune 500 Innovation Lead



12 MAJOR AREAS OF TRANSFORMATIVE TECHNOLOGY

- Sensor Tech (Wearables, Hearables, Remote / Environmental)
- Data Tech (AI, Big Data, Real Time Analytics)
- NeuroTech (EEG, fMRI)
- Neurostim Tech (tXCS, tRNS, DBS, CNS, TUS, FUS, TMS)
- Biofeedback Tech (EDA, Heart, Temp, Breath)
- Bio Tech (Genetics, Biome)
- Biostim Tech (Vagus Nerve, Peripheral Nerves)
- Perception Tech (VR, AR)
- Sleep Tech (Monitoring, Improvement)
- Healthy Spaces Tech (Design, Air, Water, Lighting, Materials)
- App Tech (Gaming, Gamification, Apps, Social, Behaviour)
- Robotics / Carebots

ASSESS



AI

AMPLIFY



Digital Medicine



Neurofeedback

ENHANCE



Biotech



Biofeedback

CONNECT



Sleep Tech



Networks & Sensors



AR/VR



Behavioral Change



Digital Manufacturing



Healthy Spaces Tech



Robotics

Sleep



Meditation



Amplified Therapist

joyable

Ginger.io

Human Centered

Stress Management



Lief Therapeutics



Corporate Platforms



JOOL HEALTH



Emotion Recognition

BEYONDVERBAL
THE EMOTIONS ANALYTICS COMPANY

eyeris

affectiva®

Mood Management/ Positive Psychology

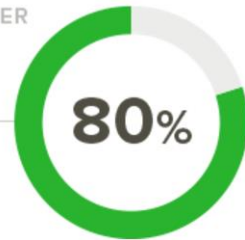
happify™

POSITIVE EMOTIONS

BEFORE



AFTER



PAVLOK



Cessation

MOTI



Affirmation

habitica



Life Tasks Game

Focus



Smart Pills

foocus



TDCs

focus@will



Sound

Emotion Tracking/ HRV Training

feel



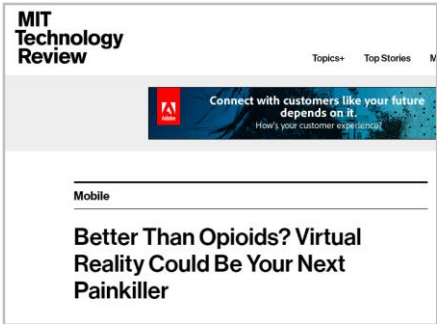
HeartMath



VR/AR Applications



BeAnotherLab



Pattern Recognition



Ginger.io

Life Data + Vocal Data + Mobile Tracking Data For Depression support

BI BEATS

Life Data + Bio Data For Stress Management

home ai sentient homes

Sentient Home = IOT Data + Mobile Data + Behavior Data For Elder Care

"Alexa, help me relax"

Intelligent Assistance



→ AMAZON



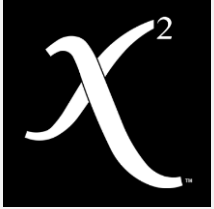


→ SIRI






→ GOOGLE


DEPRESSION / CHALLENGES

 St. Panda	 WoeBot	 X2AI
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INSPIRATION / BEST LIFE

 Lark	 JoyBot	 Ava Bot
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Replika



GateBox
Halogram Girlfriend

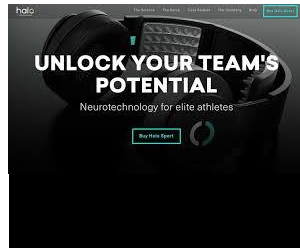
Why not use AI to challenge meaning-making?

Mood Subscriptions



Mood-altering VR
Subscribe to Happy,
Sad, Focused etc.

Neuro Stimulation



Healthy / Calming Spaces



Emotion-Based
Scents Dispersal



Engineered
Soundscapes



Circadian
Lighting



Sentient Home
Smart IOT + Calm Programs

Personalized Food

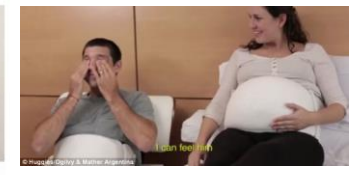


Food is Mood

Gut Biome (& Mood)



Haptics



the Touch



We are the largest ecosystem dedicated to the development of transformative technologies.



The nexus point for Transformative Technology for the academic, industry, and public sectors.



The biggest conference on Transformative Tech 750 Attendees US, TT Europe Launching May 2019



Publishes Industry Research



The annual list of the key companies and innovators in Transformative Tech.



City Chapters in Top Tech Ecosystems. Members in 70 countries and 450 cities.



World's 1st tech start-up program focused on human wellness and joy.

Corporate



Past & Current Sponsors & Partners

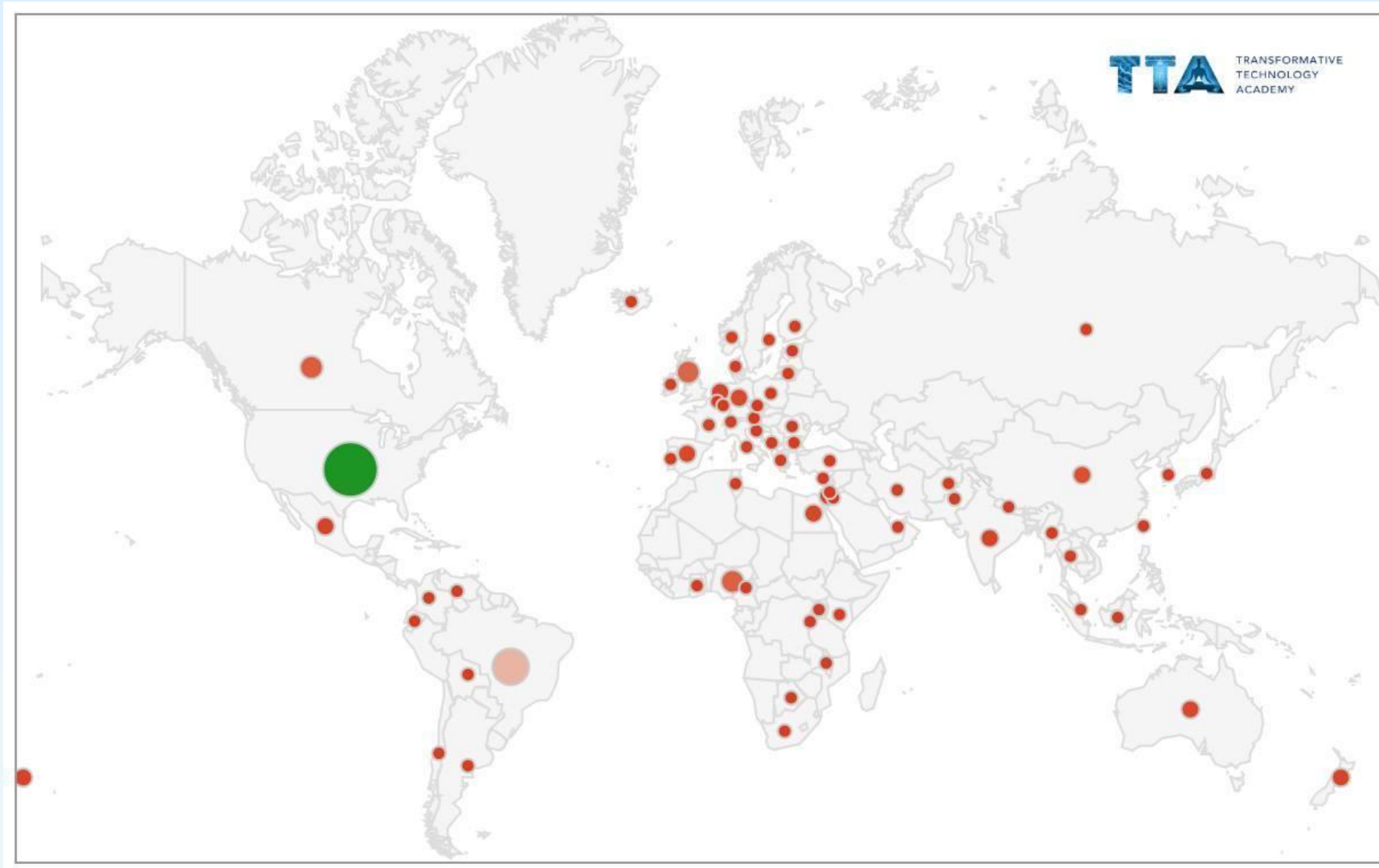
Venture Funds



Foundations



With members in 70 countries and 450 cities.





How can you help create **transformative future?**

1. IMAGINE

a world where we're all able to fulfill our full possibility.

2. CREATE

Transformative Technologies

3. BUILD

Transformative Companies

4. SUPPORT

the Transformative Technology Movement

5. SPONSOR

the Transformative Tech Conference & Academy

NO MORE NOBLER USE OF
TECHNOLOGY THAN TO
BRING PEACE TO THE MINDS
OF HUMANKIND.

CLAIM YOUR SEAT

www.ttconf.org



APPENDIX

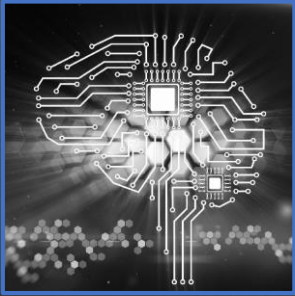
TECH TRENDS & DISRUPTIONS – TIM CHANG'S LIST



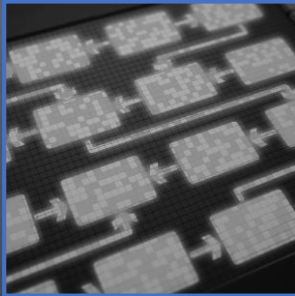
**Computer Vision:
Eyes Everywhere!**



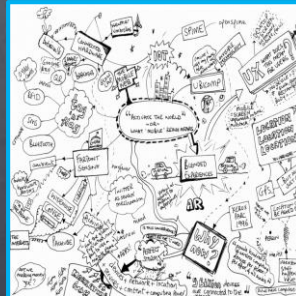
**Voice as a Platform:
Ears & Speech Everywhere**



Machine Learning



**BlockChain,
Beyond Bitcoin**



**IOT 23B+
Connected Devices**



**Hacking human perception:
AR/VR as the next interface**



**Genomics:
the Era of Read/
Write Biology**



**First the Cloud...
Next Comes the Fog**



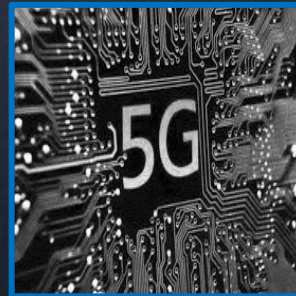
**10B+ Mobile
Connected Devices**



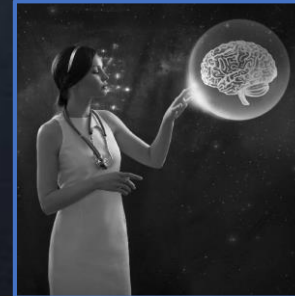
**Conversational
Interfaces
(Smart Agents)**



**Here Come
the Robots!**



**5G
Networks**



**AI-Augmented
Humans**



**Health and
Wellness:
Can Tech Save Us
From Ourselves?**

FLOURISHING

High **emotional** well-being

- Positive affect
- Negative affect (low)
- Life satisfaction

High **psychological** well-being

- Self-acceptance
- Personal growth
- Purpose in life
- Environmental mastery
- Autonomy
- Positive relations with others

High **social** well-being,

- Social acceptance
- Social actualization
- Social contribution
- Social coherence
- Social integration

Be. (Stress, Anxiety, Depression, Meditation, Happiness)

Feel. (Emotional Self-Regulation, Self-Awareness, Compassion)

Become. (Meaning Making, Growth, Purpose)

Emotional wellness is the ability to **successfully handle life's stresses** and **adapt to change** and difficult times. -

NIH

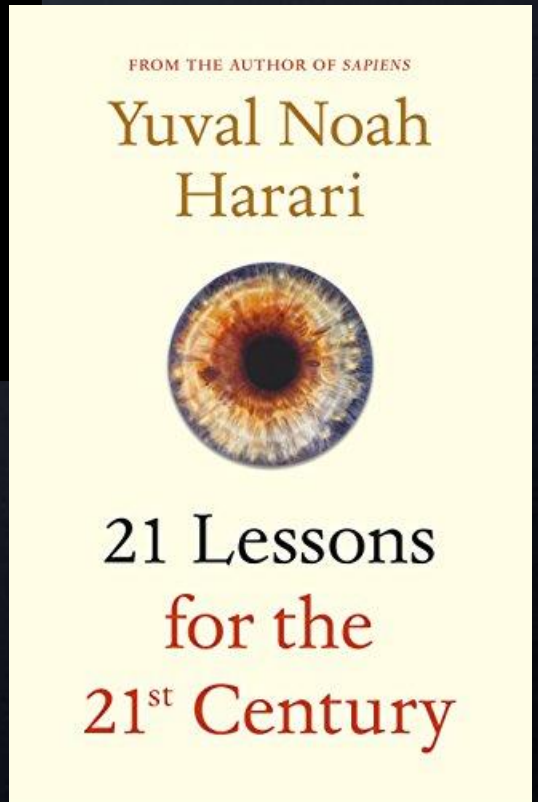
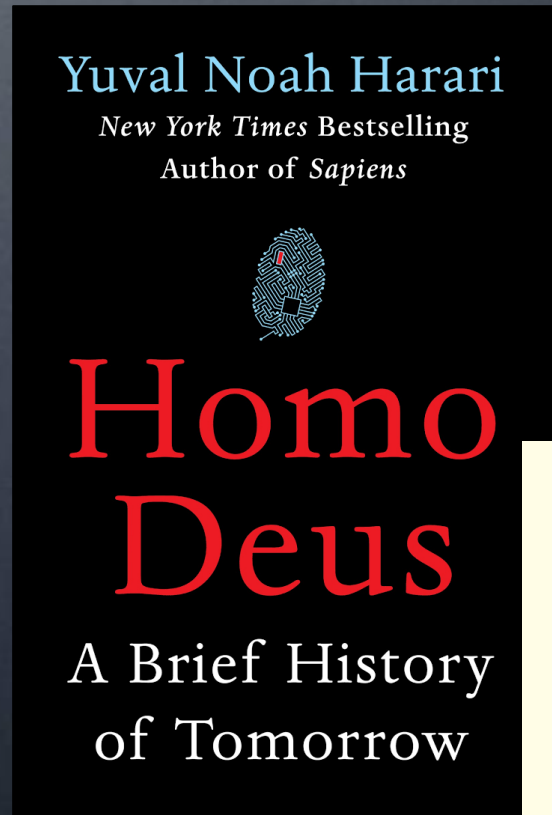
Emotional Wellness implies the ability to be **aware of and accept our feelings**, rather than deny them, have an **optimistic approach to life**, and enjoy life despite its occasional disappointments and frustrations. - USC

People who are emotionally healthy are in **control of their thoughts, feelings, and behaviors**. They are able to **cope with life's challenges**. They can keep problems in perspective and bounce back from setbacks. They **feel good about themselves** and **have good relationships**. –

Familydoctor.org

THE NEXT HUMAN AGENDA?

LONGEVITY | HAPPINESS | AUGMENTATION



FUTURE OF WORK, SOCIETY & THE HUMAN MIND

DO-ING



BE-ING



Thinking
Feeling
Creating
Learning
Connecting
Collaborating
Trust-Building
Problem Solving
Be-ing Human

“A new use case, a design intention, a pivot of current and emerging tech towards our inner growth and development as humans.”

WELLNESS
WELLBEING
SELF-AWARENESS
MEANING-MAKING
BEHAVIOR CHANGE

THE RISING GENERATION



Wants health, **happiness, and wellbeing**

See mental and physical health as **equally important**

US Millennials spend **¼ of disposable income** on wellbeing

Millennials and Gen X **own 69% of fitness wearables**

60% of US college students feel seeking help for mental health is **a sign of strength**

TRANSFORMATIVE TECHNOLOGIES
FRAMEWORK

ASSESS
AMPLIFY
ENHANCE
CONNECT



ASSESS

- Know ourselves better
- i.e. Know yourself better than Facebook or your mobile phone does



“What if I could play with a computer --
together with a computer at my side,
combining our strengths,
human **intuition** + machine's calculation,
human **strategy** + machine tactics,
human **experience** + machine's memory.

Could it be the most **perfect game** ever
played?”

**Gary Kasparov, Grandmaster Chess
Champion**

AMPLIFY

- Amplify humans practicing uniquely human skills
- i.e. Centaur Therapists, Centaur Mentors, Centaur Teaching, Future of Knowledge Transfer



On Heart-Rate Variability Training to decrease stress, overreactions, stress related errors...

“As a leader, I’ve been through many different psychology-based stress relief programs, but I’ve found this one to be far more effective.

I use it in my job every day because the physiology basis of the techniques took it out of the realm of ideas and made it tangible.”

Santa Clara Police Department & Heart Mathc

ENHANCE

- Make us more aware of ourselves to train skills
- i.e. Self-Awareness, Emotional Self-Regulation, Meaning-Making

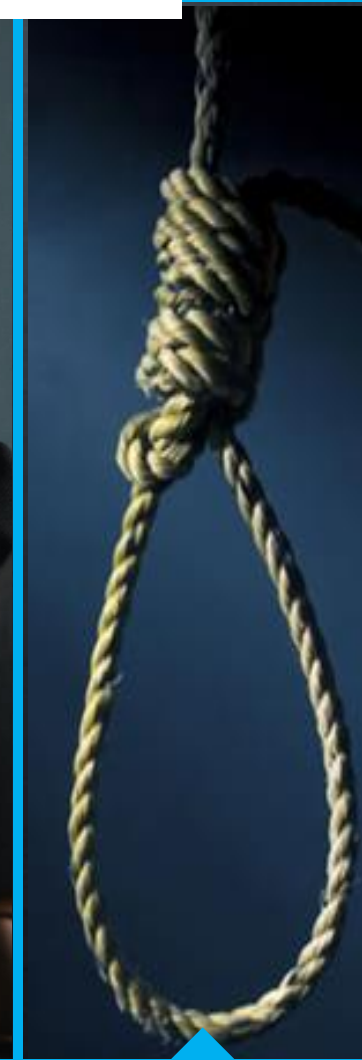
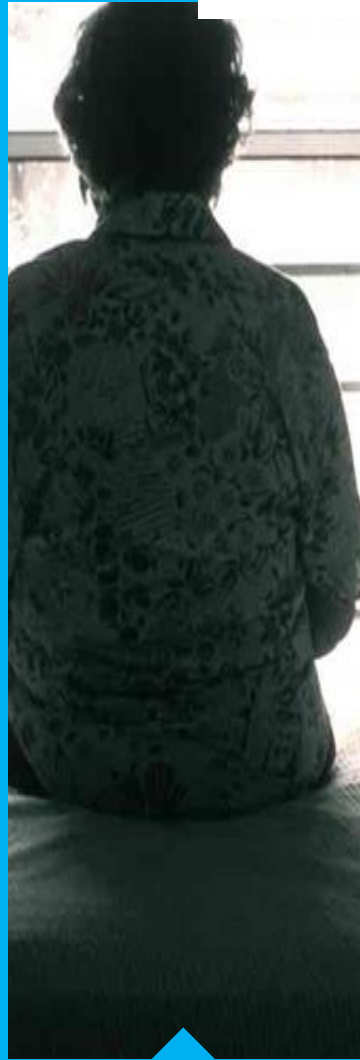


Touch Rings...
Heart rate of loved one is sent through the Internet to your ring, so you can **feel their heart beat** anywhere in the world.

CONNECT

- Connect us more deeply
- i.e. Enhance the Social Fabric, Better Teams

REQUIREMENT: A NEW HUMAN AGENDA FOR HEALTH, PERFORMANCE, AND FLOURISHING.



LOW
ENGAGEMENT

LONELINESS

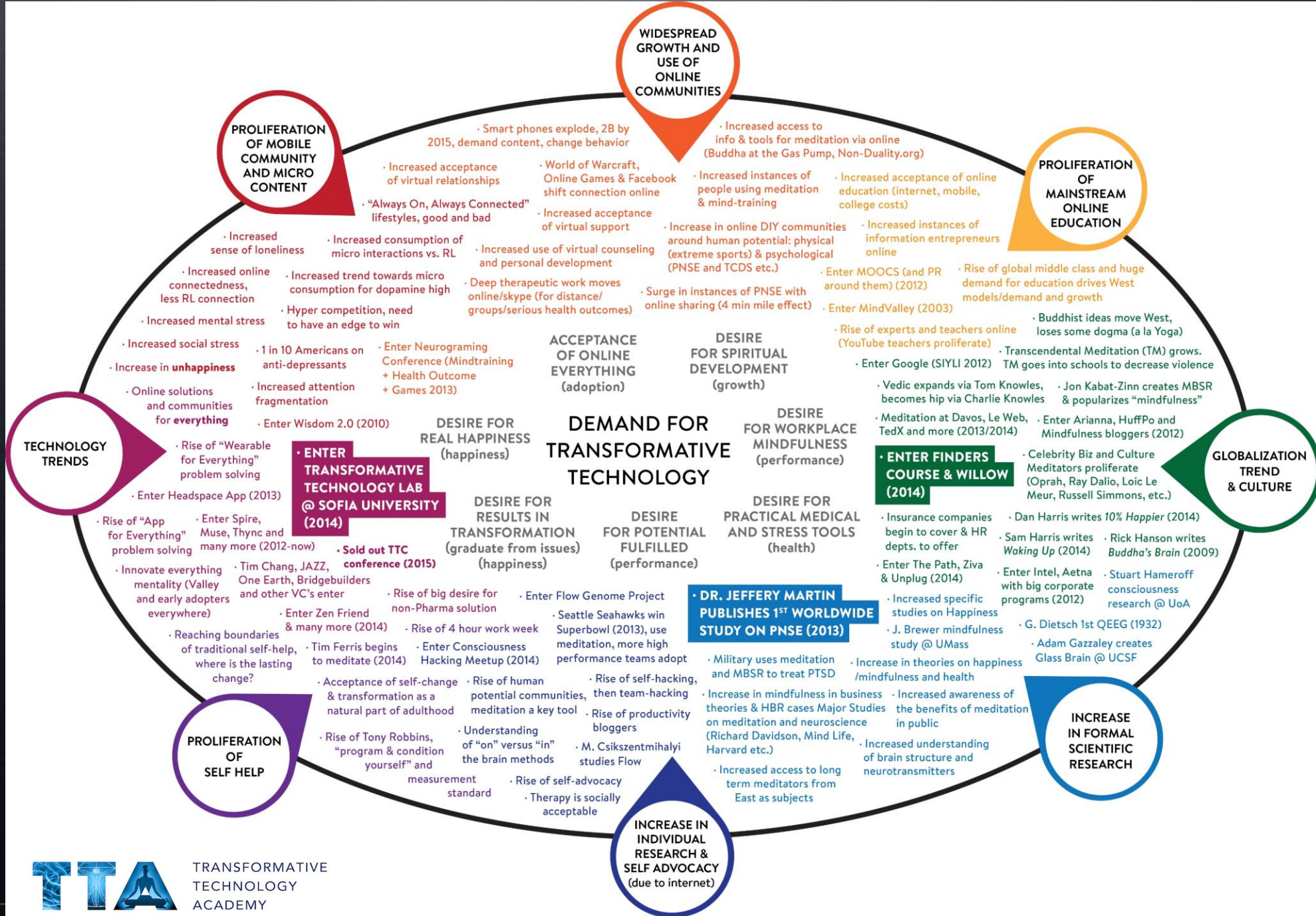
ANXIETY

STRESS

DEPRESSION

SUICIDE

LOW
SOFT SKILLS



TRANSFORMATIVE
TECHNOLOGY
ACADEMY

TRANSTECH

200

TRANSFORMATIVE TECHNOLOGIES

www.transtech200.com

The TransTech 200 is the annual list of the key innovators who are driving technology for mental health, emotional wellbeing, and human thriving. From well-established individuals and ventures to those who are in the process of bringing new advancements forward that will change the world in the months and years to come.

While not all of the selections are obvious, every person or company on this list is working on technology that can be used to elevate the mental and emotional capacity of mankind.

WE TRACK 11 TECHNOLOGY AREAS:

- » Sensor Tech (Wearables, Hearables, Remote/Environmental)
- » Data Tech (AI, Big Data, Real Time Analytics)
- » Neurofeedback Tech (EEG, fMRI)
- » Neurostim Tech (tXCS, tRNS, DBS, CNS, TUS, FUS, TMS)
- » Biofeedback Tech (EDA, Heart, Temp, Breath)
- » Biostim Tech (Vagus Nerve, Peripheral Nerves)
- » Perception Tech (VR, AR)
- » Sleep Tech (Monitoring, Improvement)
- » Healthy Spaces Tech (Design, Air, Water, Lighting, Materials)
- » App Tech (Gaming, Gamification, Apps, Social, Behavior)
- » Biotech (Biome, DNA)

TRANSTECH 200

SUPPORTING TECHNOLOGIES

RETHINKING NIGHTTIME

RETHINKING HUMAN GROWTH AND OPTIMIZATION

RETHINKING MEDITATION

RETHINKING OUR SPACES

RETHINKING INTELLIGENT ASSISTANCE

MULTIPLE AREAS

RETHINKING CORPORATE PLATFORMS

\$1.6BN FUNDING

(Source: Crunchbase, Crowdfunding)

ECOSYSTEM

SUPPORTING HARDWARE AND SOFTWARE PLATFORMS

COMMUNITY ORGANIZATIONS

FOUNDERS LIST

UP & COMING LIST

NOTABLE MENTION LIST

THE TRANSFORMATIVE TECH MARKET: A HIDDEN MULTI TRILLION DOLLAR CATEGORY

COST OF US STRESS (\$300BN)	COST OF LOW EMPLOYEE ENGAGEMENT (\$550BN WW)	MEDITATION \$1BN US	PREVENTATIVE HEALTH \$534BN WW	WELLNESS REAL ESTATE \$118.6BN WW
DEPRESSION, STRESS, & ANXIETY DRUGS \$22BN WW	WORKPLACE WELLNESS \$43.3BN US	NEUROTECH \$8.4BN WW	SLEEP TREATMENT \$50BN WW	WELLNESS TOURISM \$563.2BN WW
MENTAL HEALTH TREATMENT \$89BN US	CORPORATE TRAINING \$360BN WW	WEARABLES 80MN Units WW (18.4% CAGR)	FITNESS & MIND/BODY \$542BN WW	HEALTHY EATING & WEIGHT LOSS \$647BN WW
ADDICTION TREATMENT \$35BN US	PERSONAL DEVELOPMENT \$10BN US	EMOTION DETECTION RECOGNITION \$6.72BN	ALTERNATIVE MEDICINE \$199BN WW	YOGA \$27BN US

- <https://www.globalwellnessinstitute.org/wellness-now-a-372-trillion-global-industry/>
- <http://www.neurotechreports.com/pages/execsum.html>
- <https://www.businesswire.com/news/home/20170505005558/en/79.85-Billion-Sleep-Aids-Market-Product-Sleep>
- <https://www.forbes.com/sites/daviddisalvo/2015/08/06/how-the-sleep-industry-is-making-billions-from-your-lack-of-shuteye/#5696984c2542>
- <https://www.ibisworld.com/search/default.aspx?st=sleep>
- <https://www.alliedmarketresearch.com/sleep-aids-market>

- <https://www.inc.com/ariana-ayu/the-enormous-cost-of-unhappy-employees.html>
- https://www.marketsandmarkets.com/Market-Reports/emotion-detection-recognition-market-23376176.html?gclid=CjwKCAjwvppjVBRANEiwAJAxlgGMII4eTmKzxiDF_jqsl2EWT9W0PKOXdrhFIBRY2OiksgHFu68qBoCin0QAyD_BwE
- <https://www.idc.com/getdoc.jsp?containerId=prUS43408517>
- <https://www.prnewswire.com/news-releases/corporate-training-market-to-grow-nearly-11-cagr-to-2020-601841585.html>
- <https://blog.marketresearch.com/whats-next-for-the-9-9-billion-personal-development-industry>