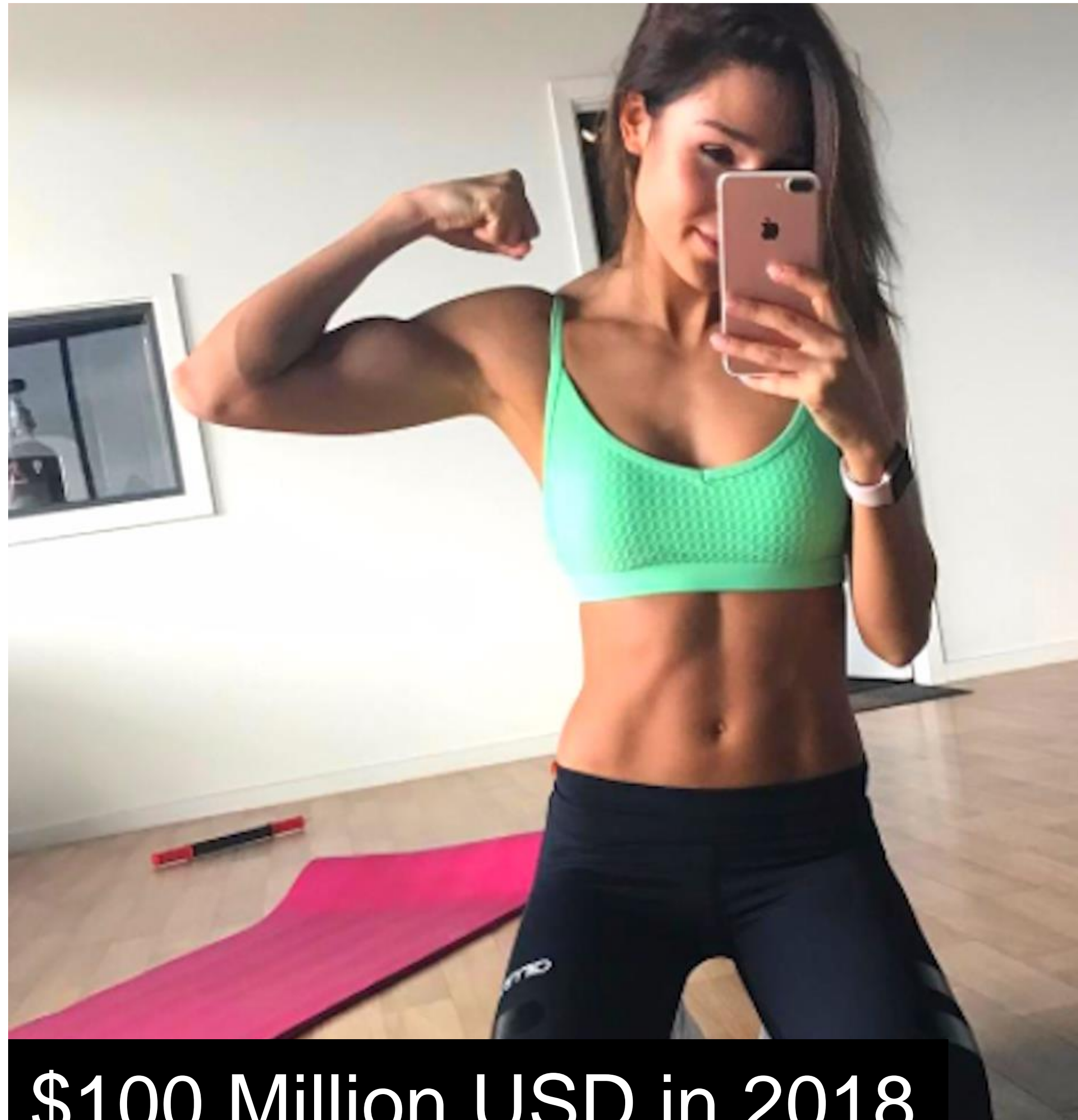




DIGITAL CULTURE

How Technology is Changing the Way We Communicate, Work, and Behave.

@rahafharfoush



\$100 Million USD in 2018





How are you there?

Roman
I'm OK. A little down.

Roman
I hope you aren't doing anything interesting without me?

A lot is happening. Life is going on, but we miss you.

Roman
I miss you too.

Roman
I guess this is what we call love.



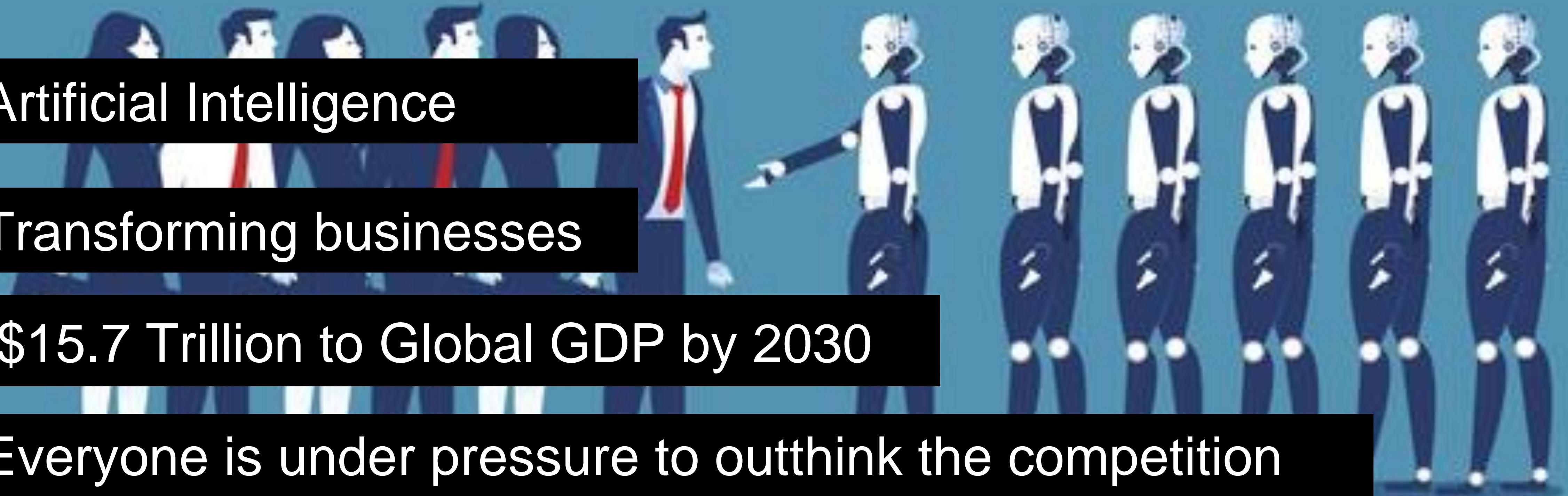
Tool Centric Discussions

Artificial Intelligence

Transforming businesses

\$15.7 Trillion to Global GDP by 2030

Everyone is under pressure to outthink the competition



BIG DATA & AI LANDSCAPE 2018

INFRASTRUCTURE

HADOOP ON-PREMISE

cloudera Hortonworks
MAPR Pivotal
IBM InfoSphere
bluedata jethro

HADOOP IN THE CLOUD

aws Microsoft Azure
Google Cloud IBM InfoSphere BigInsights
TREASURE DATA Qubole altiscalse
CAZENA CenturyLink

STREAMING / IN-MEMORY

aws databricks stream
confluent GridGain ORACLE
dataArtisans hazelcast
TERRACOTTA ix FASTDATA
WallarooLABS

ANALYTICS

DATA ANALYST PLATFORMS

Microsoft pentaho alteryx
Digital Reasoning GUAVUS AYASDI
ATTIVO Datameer Quid Incorta
interana ClearStory Origami
ENDOR MODE BottleNose switchboard

DATA SCIENCE PLATFORMS

IBM KNIME data iku
DOMINO rapidminer
CONTINUUM ANALYTICS ALGORITHMIA
DATAWATCH ANGOSS SAS

APPLICATIONS - ENTERPRISE

SALES

einstein CHORUS
INSIDESALES.COM
conversica GOVU
clari aviso tact.ai
fuse|machines TROOPS

MARKETING - B2B

RADIUS App Annie
EVERSTRING Lattice
MINTIGO sense
tubular DataFox Reflektion
ENGAGIO mrp

MARKETING - B2C

zeta bloomreach SendGrid
BlueYonder [PERSADO] kahuna
ACTIONIQ SAILTHRU BLUECORE
QUANTIFIND mparticle Ampero
amperity TEALUM Simon Lytics

CUSTOMER SERVICE

MEDALLIA zendesk
CLARABRIDGE
Gainsight NGDATA
DigitalGenius afiniti
AUTOMAT frame.ai
msgai INTERCOM Ca@Desk

APPLICATIONS - INDUSTRY

ADVERTISING

AppNexus
criteo xAd
ORACLE MOAT
theTradeDesk
dstillery LiveIntent
TAPAD dataxu gumgum
Copper DYNAMIC YIELD

EDUCATION

Lullishuo
KNEWTON
Clever
kidadaptive
PANORAMA
knowre gradscope

GOVERNMENT

OPENGOV mark43
FiscalNote
GRIDSMART
LiveStories
Passport
SmartProcure
STREETLIGHTDATA
OpenDataSoft

REAL ESTATE

REDFIN
Opendoor
VTS
CREDIFIT
reonomy
COMPSTAK
CAPE

FINANCE - INVESTING

KENSHC
Dataminr
Quantopian
ADDEPAR
NUMERA
iSENTIUM
ALGORIZ
RavenPack
PAGAYA

FINANCE - LENDING

ondeck affirm
拍拍贷 JIANPU.AI
Kreditech AVANT
TALA finance Upstart
INSIKT upgrade 100Credit
WeLab WeCASH
TrueAccord MoneyLion
Active.AI aire cignifi

INSURANCE

metromile
Lemonade
CYENCE
Shift Technology
TRACTABLE

CROSS-INFRASTRUCTURE/ANALYTICS

aws Google Cloud Microsoft IBM SAP Hewlett Packard Enterprise SAS IOIODATA vmware TIBCO TERADATA ORACLE NetApp syncsoft MAPR cloudera

OPEN SOURCE

FRAMEWORK

hadoop HADOOP
hadoop HADOOP
Flink YARN TEZ
Spark MESOS CDAP

QUERY / DATA FLOW

Spark SQL HIVE
presto
SLAMDATA APACHE DRILL
Google Cloud Dataflow Flink

DATA ACCESS

cassandra nifi mongoDB
CouchDB OPENTSDS riak
HBASE Cloud Spanner ACCUMULO

COORDINATION

talend
Apache Zookeeper
Apache Ambari
Apache Airflow

STREAMING

Spark APEX
Flink beam
kafka druid
STORM

STAT TOOLS

python
ScalaLab
NumPy
SciPy
julia

AI / MACHINE LEARNING / DEEP LEARNING

TensorFlow theano
Caffe Microsoft Cognitive Toolkit OpenAI
Apache SINGA FeatureFu mxnet
neon mllib DL4J MAHOUT Aerosolve

SEARCH

elasticsearch
Solr Lucene

LOGGING & MONITORING

elasticsearch kibana
SENTRY logstash
Prometheus

VISUALIZATION

BeakerX
Rodeo

COLLABORATION

jupyter Zeppelin
ANACONDA

SECURITY

Apache Ranger
KNOX
Sentry

DATA SOURCES & APIs

HEALTH

Apple VALIDIC
practicefusion
fitbit GARMIN
HUMAN API kinsa

IOT

GE Digital
UPTAKE thingworx
helium samsara
AUGURY estimate

FINANCIAL & ECONOMIC DATA

Bloomberg THOMSON REUTERS DOW JONES
S&P CAPITAL IQ CBINSIGHTS xignite Quandl
ENVESTNET YODLEE PREMISE @estimate SECOND MEASURE
Eagle Alpha StockTwits PLAID Thinknum earnest

AIR / SPACE / SEA

Orbital Insight planet SKYCATCH
Airware AIRBOTICS
spire kespri PRECISIONWORK
UNDERSTORY Descartes Labs
WINDWARD telluslabs
DroneDeploy MarineTraffic

PEOPLE / ENTITIES

axiom experian
EPSILON InsideView
Crimson Hexagon Quantcast
BASIS SAFE GRAPH

LOCATION INTELLIGENCE

FOURSQUARE MapAnything mapbox
sense360 pinneyboces HEXAGON
PlaceIQ esri factual
CARTO Mapillary Streetline
cuebiq Radar

OTHER

qualtrics
DATA.GOV
data.world
enigma
mobilewalla CRUX
HIGH-CHARTS

DATA RESOURCES

DATA SERVICES

Palantir OPERA
BUCKEN VALLEY DATA SCIENCE
fractal kaggle
DataKind
EXL innopluxus

INCUBATORS & SCHOOLS

PLURALSIGHT CA galvanize
DataCamp DataElite
INSIGHT The Data Incubator METIS

RESEARCH

facebook research
OpenAI MIRI
VECTOR INSTITUTE
ALLEN INSTITUTE FOR ARTIFICIAL INTELLIGENCE

Final 2018 version, updated 07/15/2018

© Matt Turck (@mattturck), Demi Obayomi (@demi_obayomi), & FirstMark (@firstmarkcap)

mattturck.com/bigdata2018

FIRSTMARK
EARLY STAGE VENTURE CAPITAL

JOB AGGREGATOR.



TESTING.



AI & AUTOMATION.



APPLICANT TRACKING.



RECRUITMENT CRM.



VIDEO INTERVIEWING.



HUMAN CAPITAL.





Thread

Surface Level Innovations

Changes to processes, workflows, pipelines

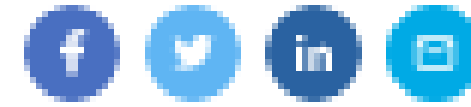
Tech is weaving itself into the social fabric of our lives

Revealing truths about who we are and what we want

What this means for the world that we are co-creating

TECH · ARTIFICIAL INTELLIGENCE

Tech CEOs Declare This the Era of Artificial Intelligence



Google CEO Sundar Pichai. Photograph by Justin Sullivan Getty Images



Era of Humanness

AI will force us to redefine what it means to be human.

5 Forces:

How Digital Culture is Influencing our Behavior


01. Data Abundance




Moving from data scarcity to data abundance
is a huge and fundamental societal shift.




330
Accounts Created
171000
Tweets




60
Video Hours
Uploaded
69420
Video Hours
Watched




5460
User Searches



694440
Minutes Used



555570 Likes
30000 Comments
20820 Uploaded




173610
+1s




690
Blog Posts




138240
Searches
\$48060
Ad Revenue




30 Posts
390 Comments
6360 Votes




13890
Posts




7140
Pins




1530
Items Purchased
\$70770
Money Spent



1050
Check-Ins



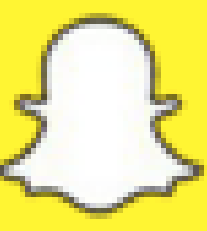
15
Reviews




102083340
Emails Sent




347220
Files Saved




173610
Stories Viewed
243060
Messages Sent




19020
App Downloads



37080
App Downloads



1565880 Likes
1649280 Posts
180 GB of Data



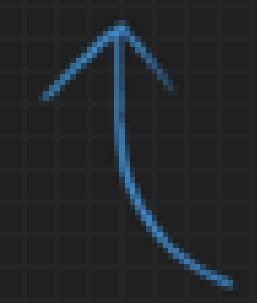
360
Accounts Created
6597210
Messages Sent



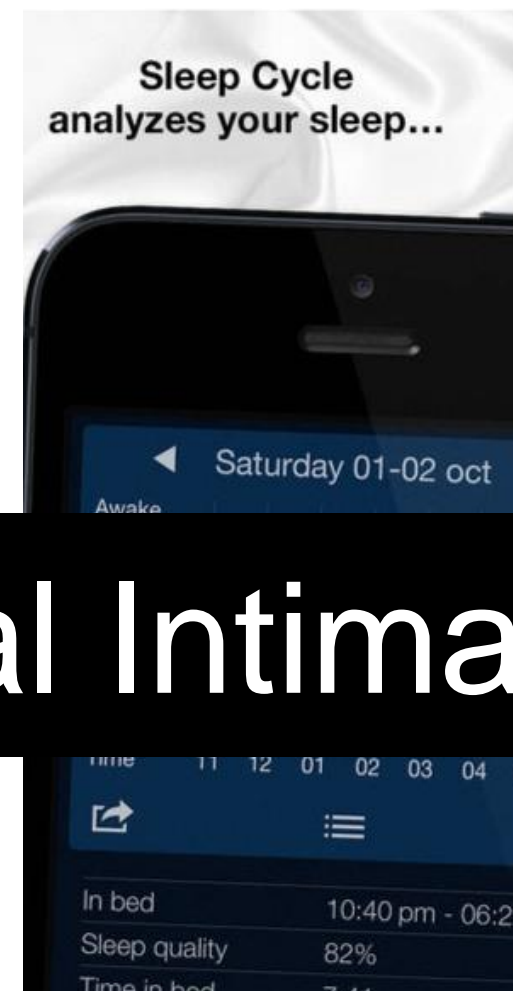
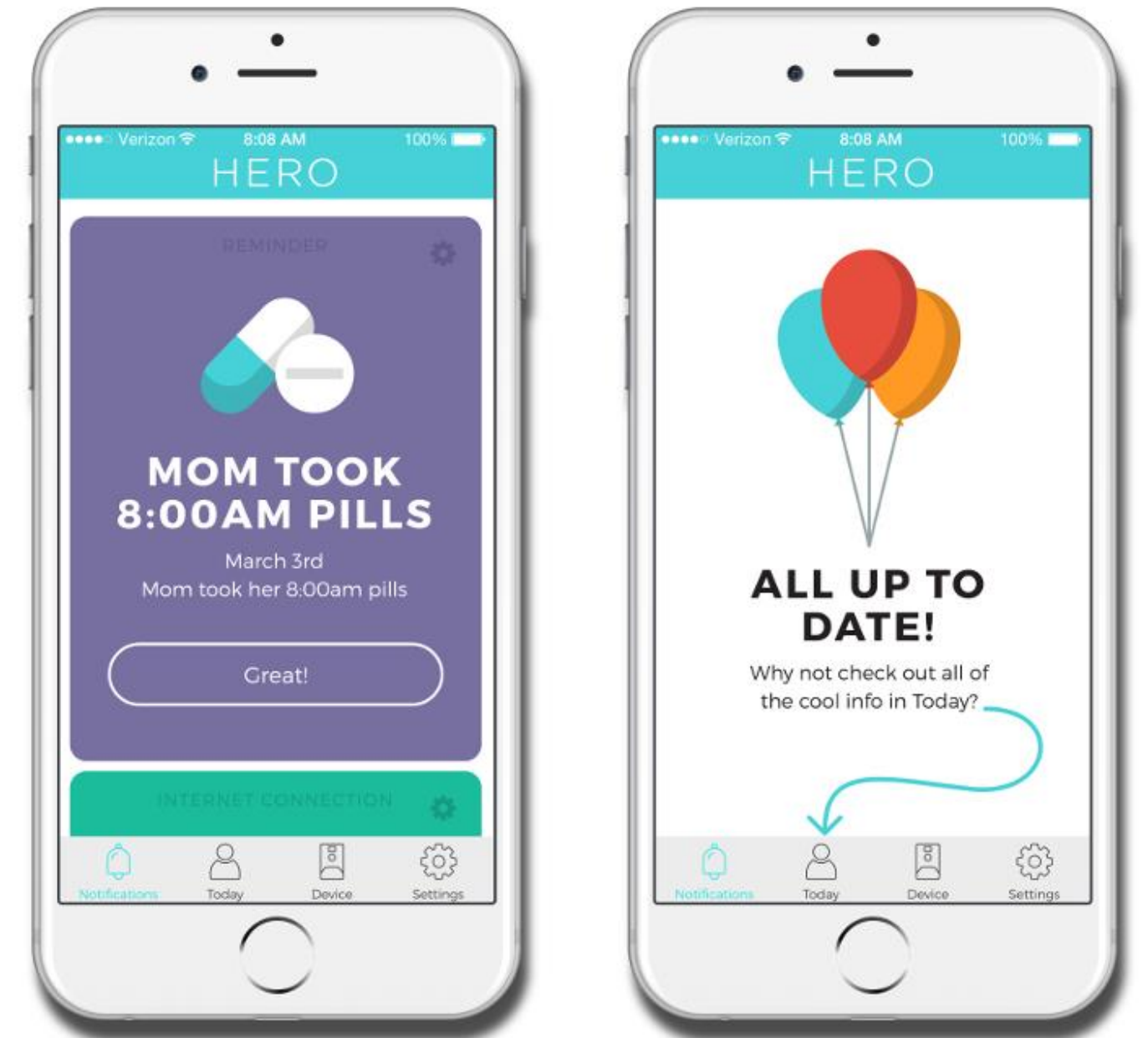
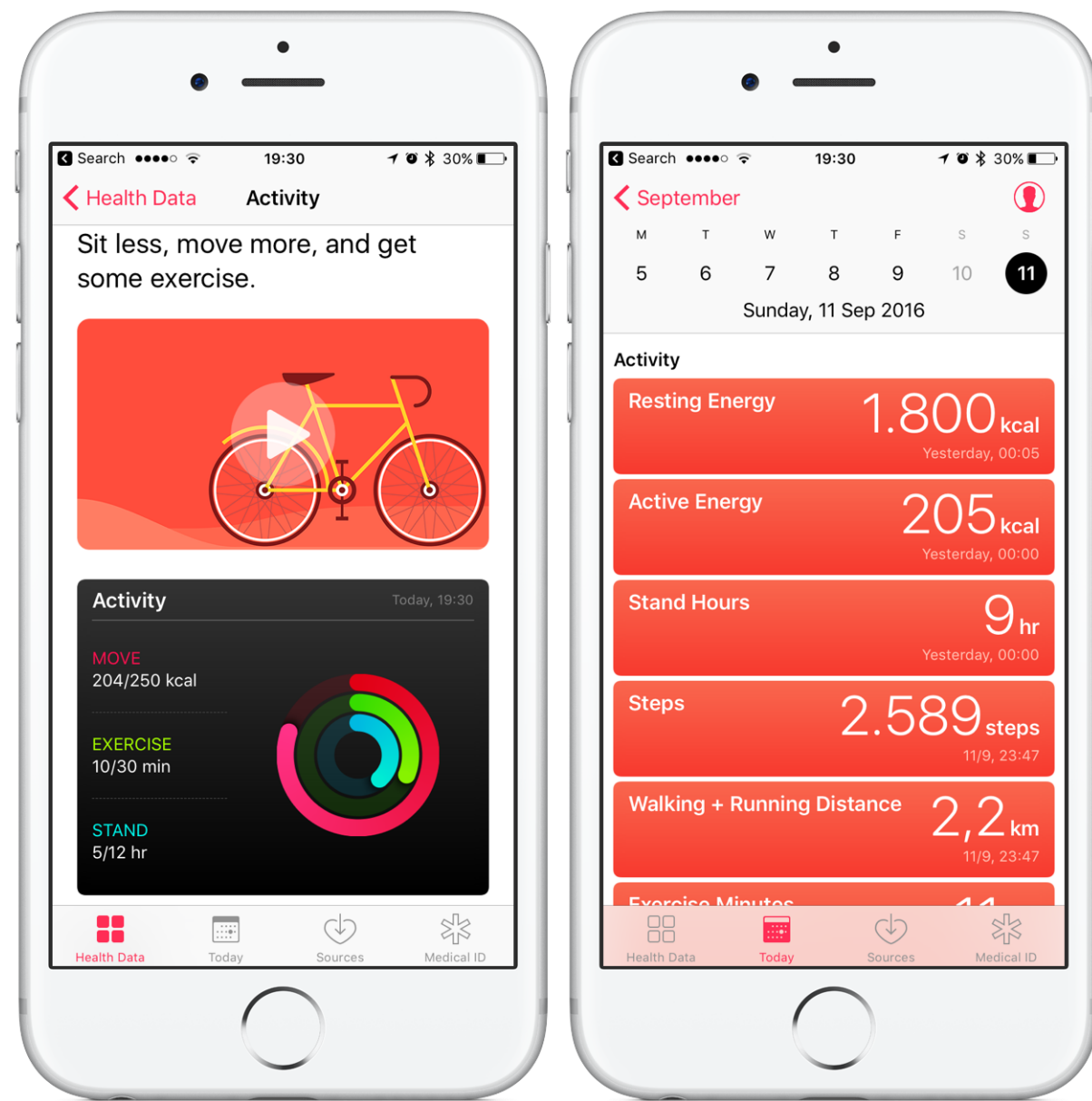
11580
Hours Watched



30570
Hours Streamed



By the way, in the 30 seconds you've been on this page,



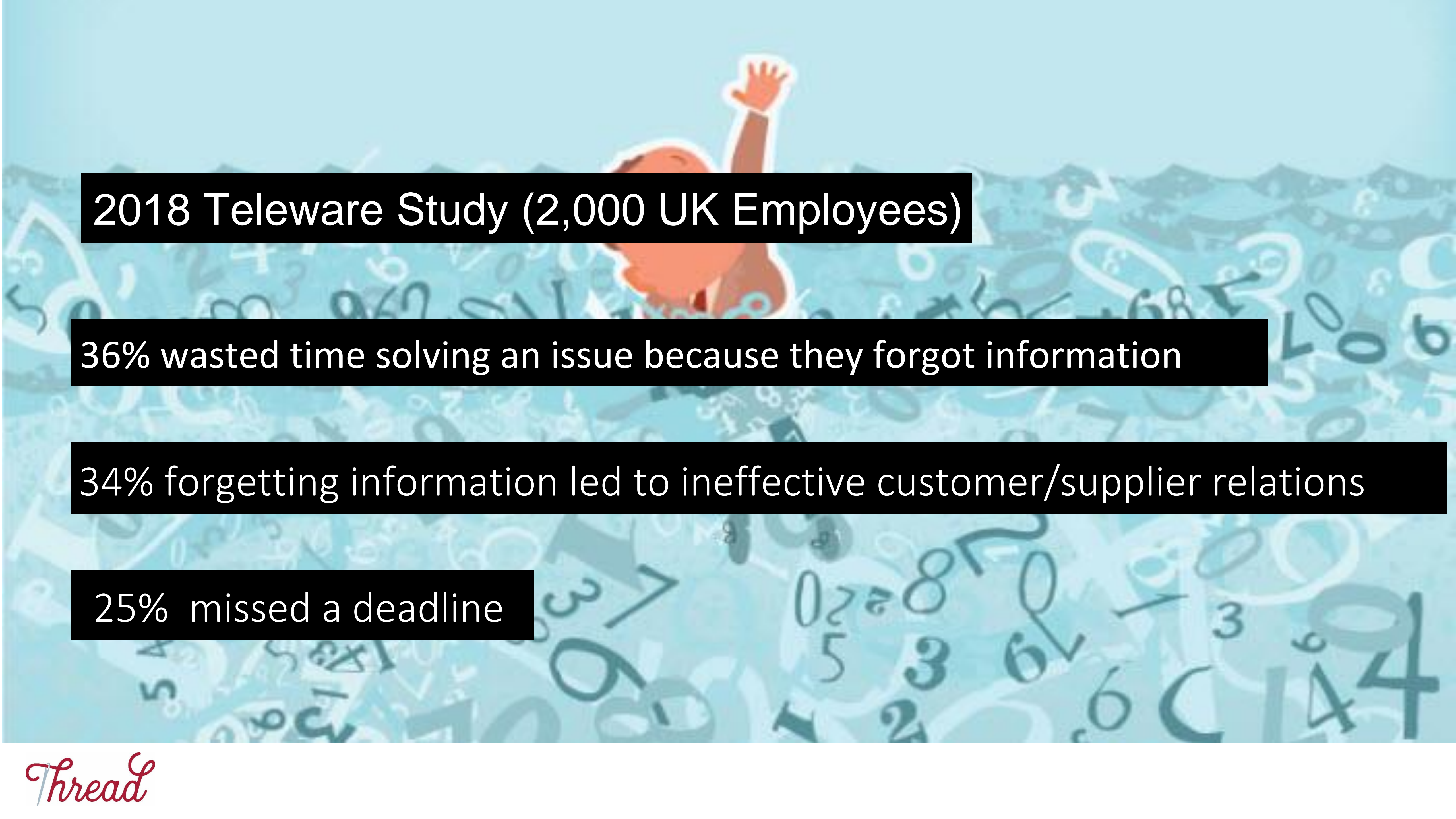
Normalization of Digital Intimacy

Phone Usage Habits: A Decade of Digital Dependency (UK)

40% of adults look at their phone within 5 minutes of waking up

15-24 spend 4 hours a day on their phones (vs. 2:49)

Average Consumer: 35 apps installed on their phone



2018 Teleware Study (2,000 UK Employees)

36% wasted time solving an issue because they forgot information

34% forgetting information led to ineffective customer/supplier relations

25% missed a deadline



We are overwhelmed

91% Employees Disregard Information w/o fully reading

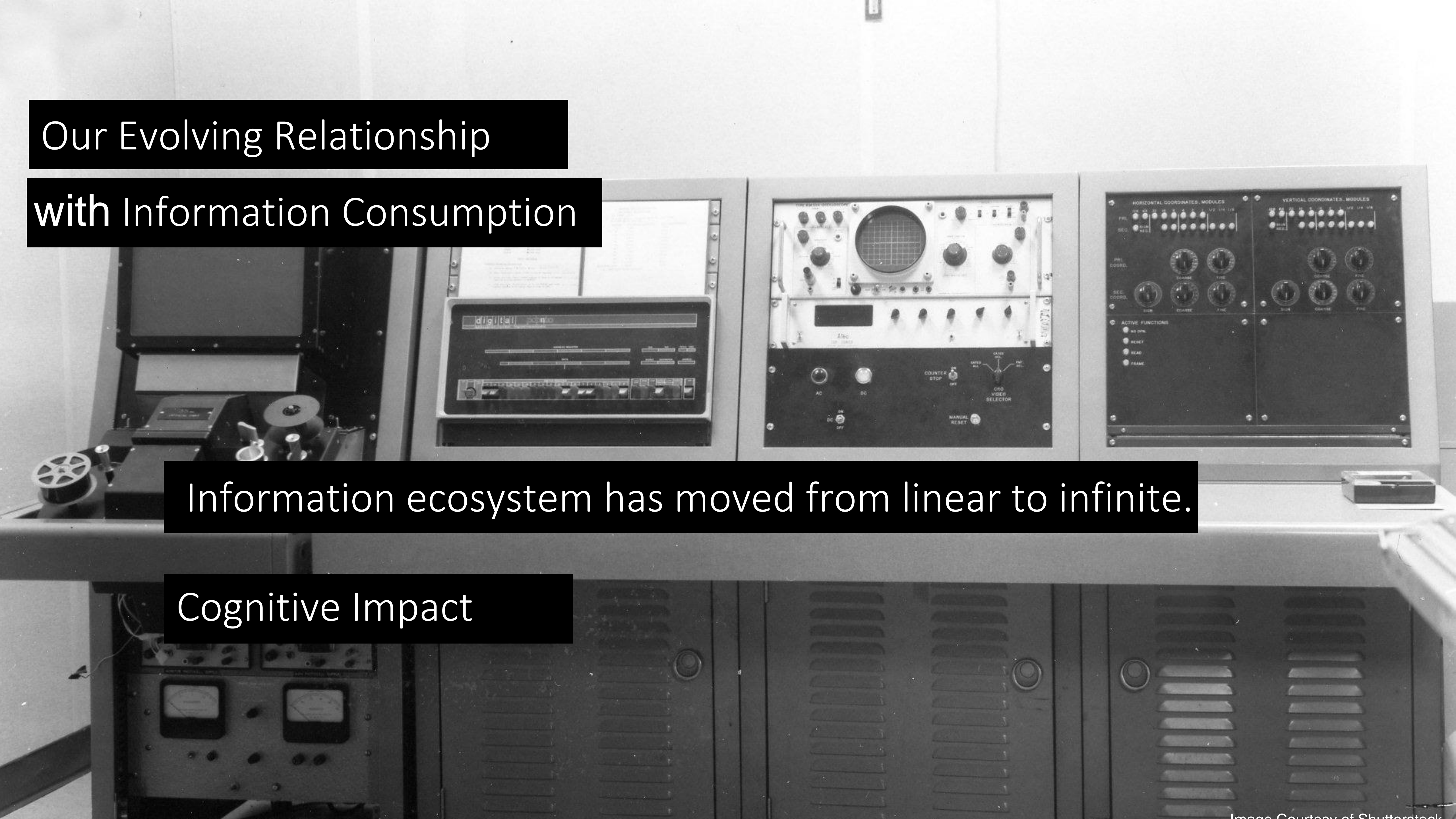
62% Say Quality of Work Suffers

52% Feel Demoralized or at “breaking point”

Our Evolving Relationship with Information Consumption

Information ecosystem has moved from linear to infinite.

Cognitive Impact



Those that suffer from **LOW BATTERY ANXIETY** panic when their phone battery drops to 20 percent or lower and exhibit symptoms including:



Asking a total stranger to charge their smartphone

39%



Arguing with a significant other or romantic interest because of unanswered calls or texts

23%



Ordering something at a bar or restaurant just to use their power outlet

22%



Skipping the gym to charge their smartphone

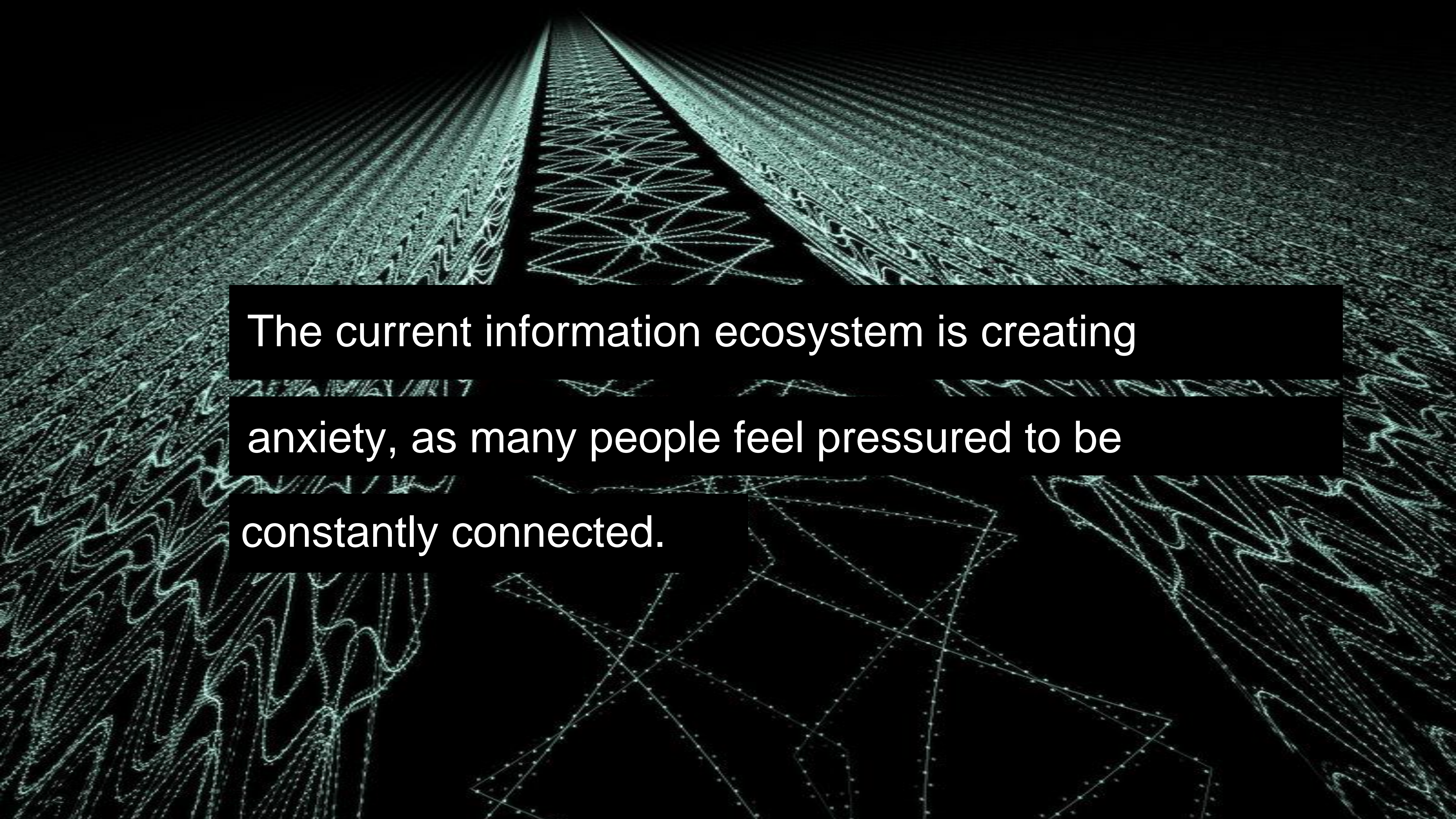
33%



Secretly 'borrowing' someone else's charger

35%

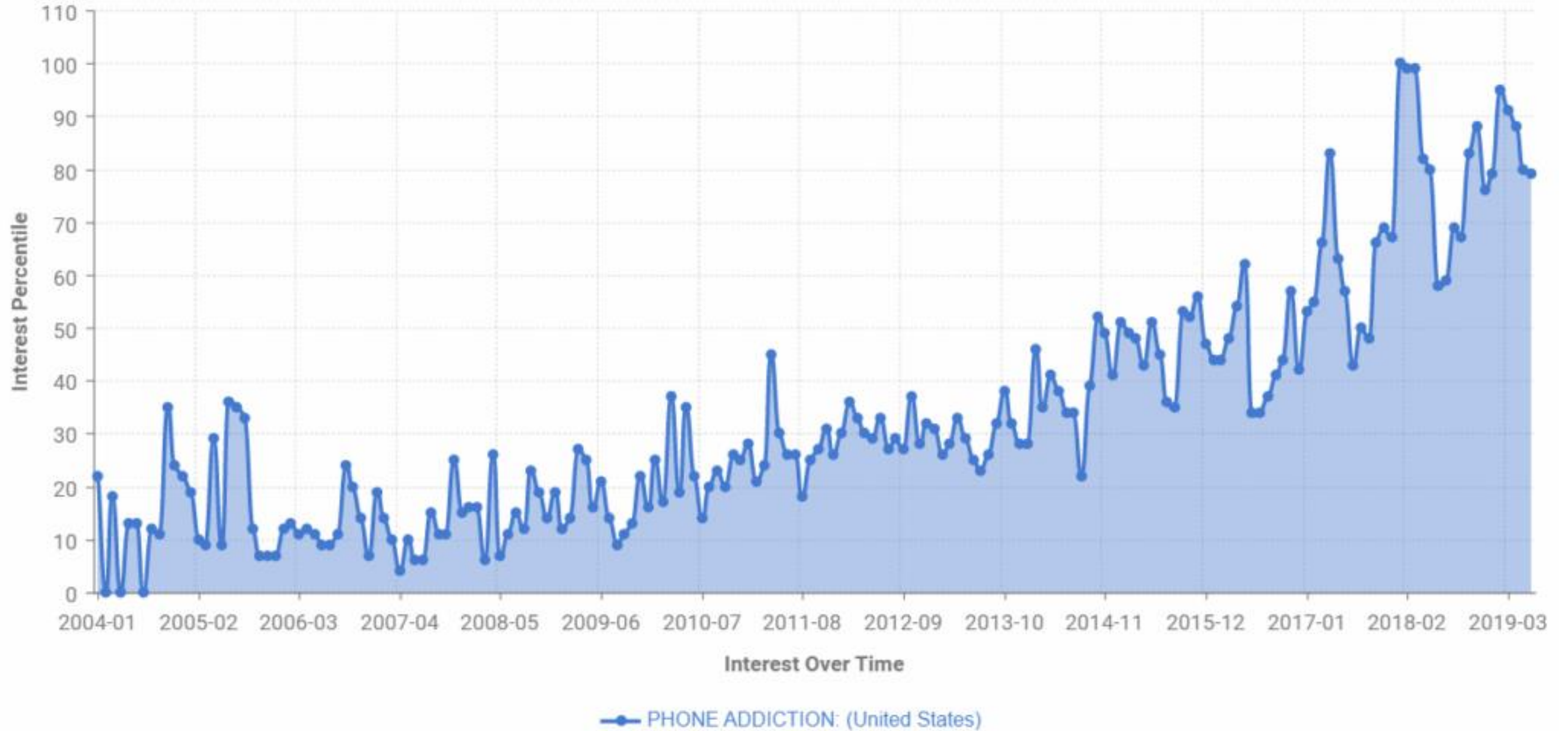




The current information ecosystem is creating anxiety, as many people feel pressured to be constantly connected.

Phone Addiction Over Time (United States)

US Phone Addiction Support Queries: Jan 2004 - June 2019



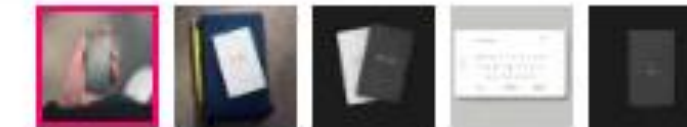


DIGITAL DETOX[®] RETREATS

The first internationally renowned tech-free personal wellness retreat where attendees give up their smartphones and gadgets in exchange for an off-the-grid experience of growth, reflection, mindfulness, creativity, community and (dis)connection.

Thread

INDIEGOGO 



INDEMAND

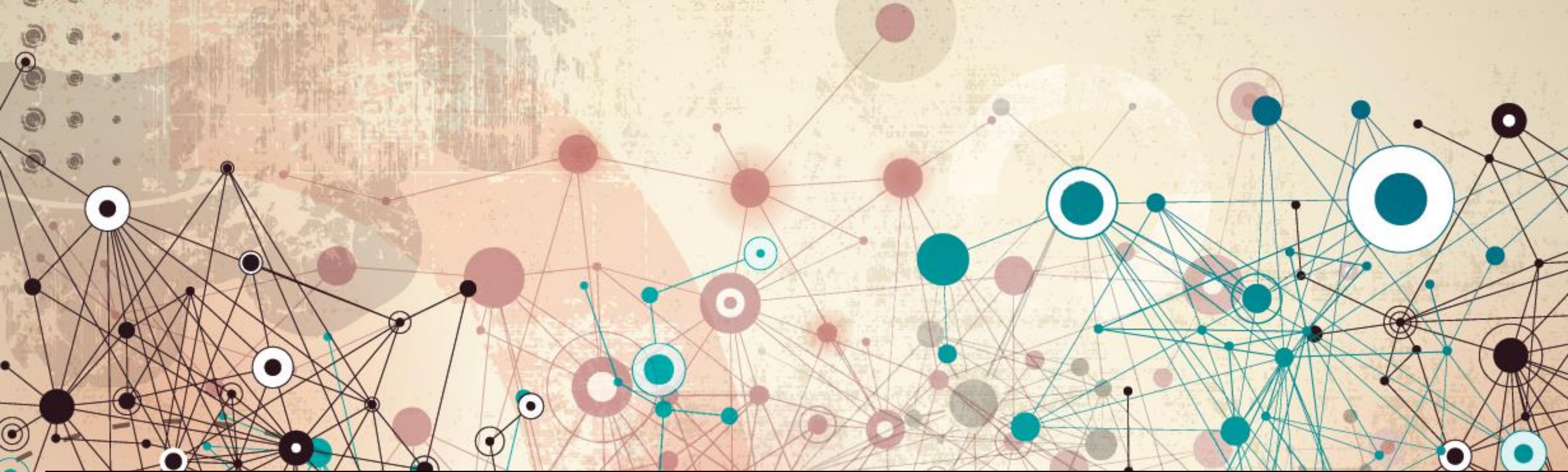
Light Phone 2

A simple 4G phone with e-ink, messaging & other essential tools—a phone that actually respects you.

PROJECT OWNER

Light **Light**
Brooklyn, United States
1 Campaign | [More](#)

\$1,987,899 USD total funds raised
615% funded on April 22, 2018



We need to update how we process and share knowledge within the organization.

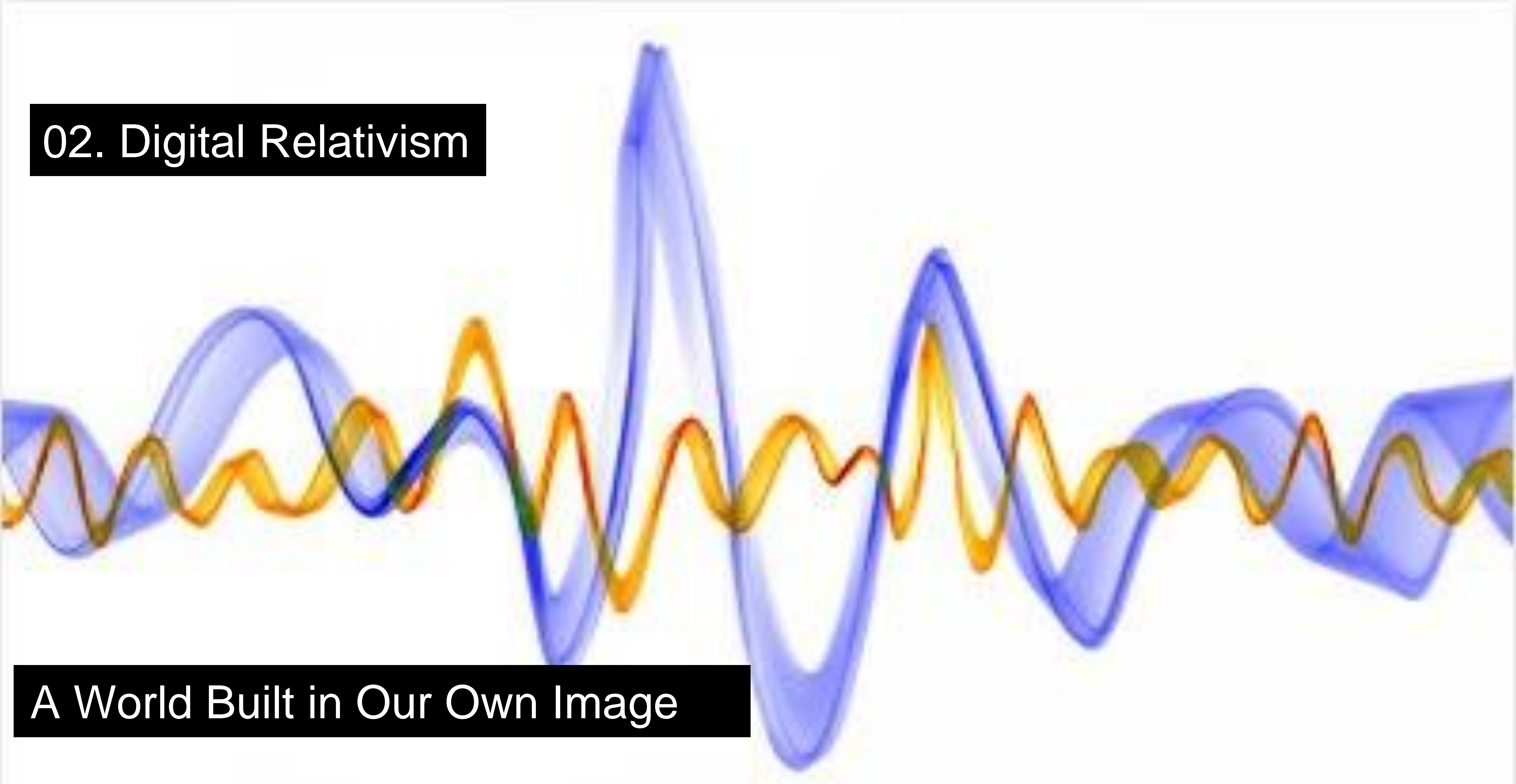


Q: Are we prioritizing recovery into our data strategy?



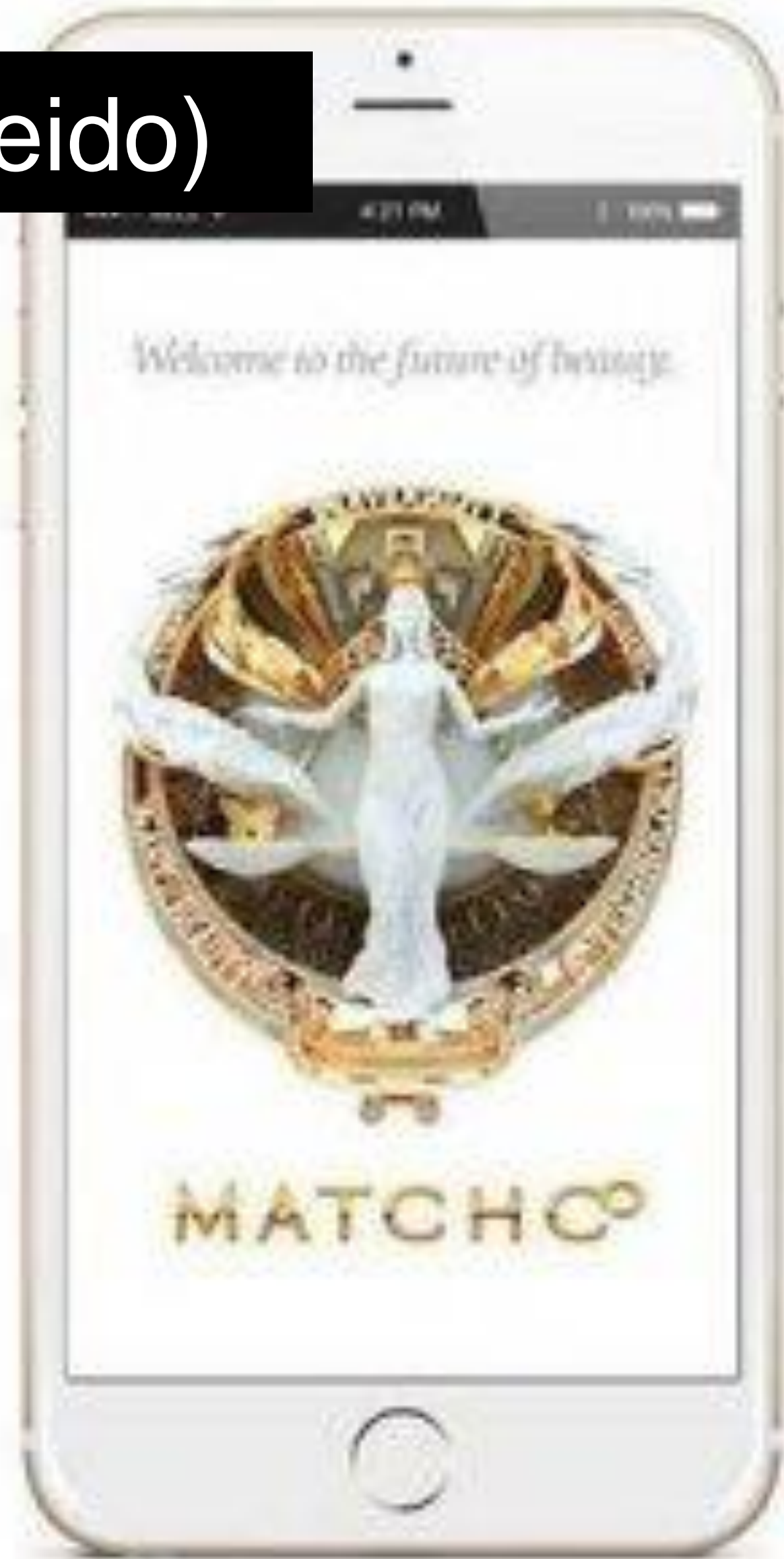
Information Zen

02. Digital Relativism

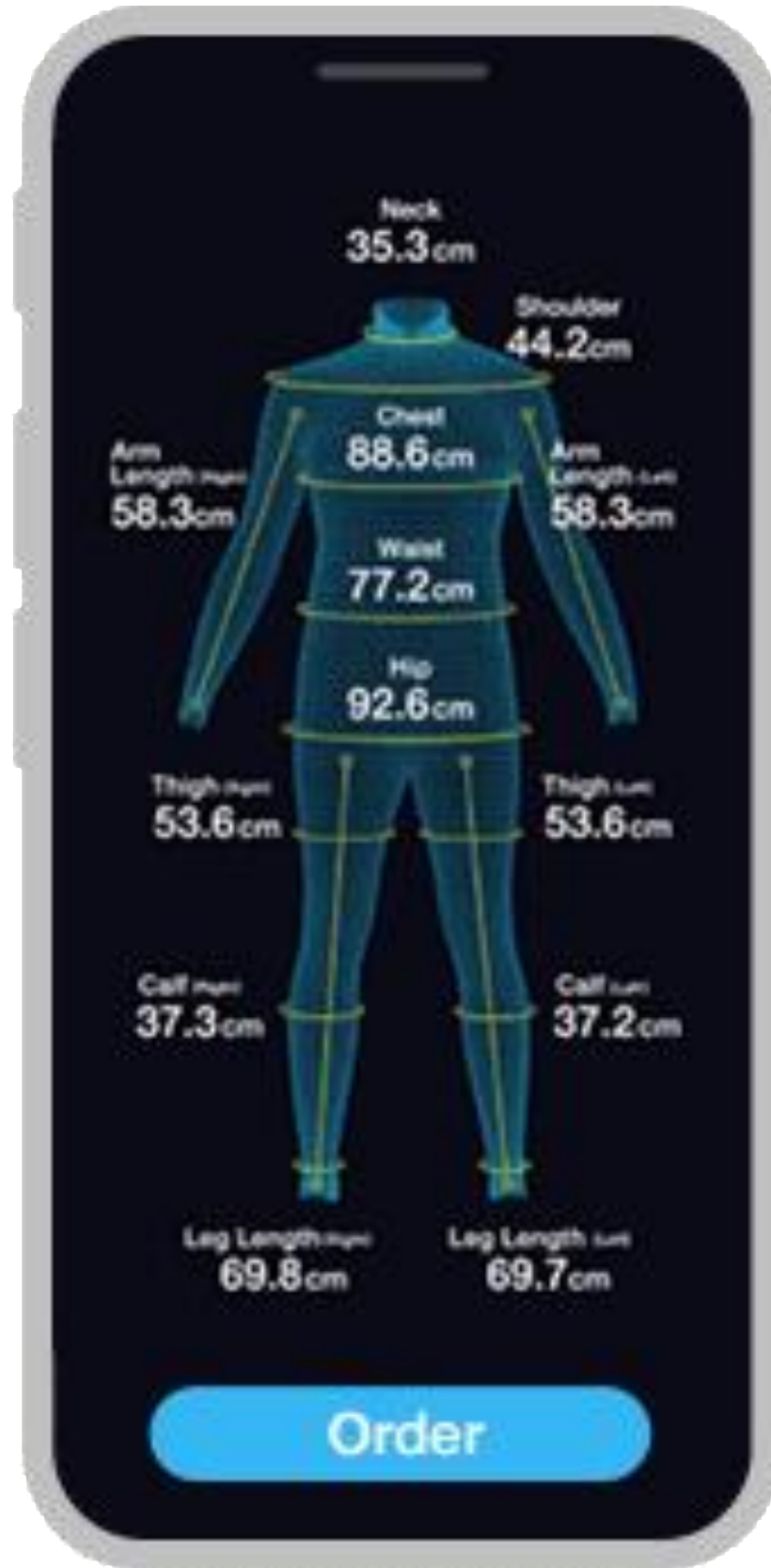


A World Built in Our Own Image

MatchCo (Shiseido)



ZoZo



Thread

DNAfit

Let's talk about you.

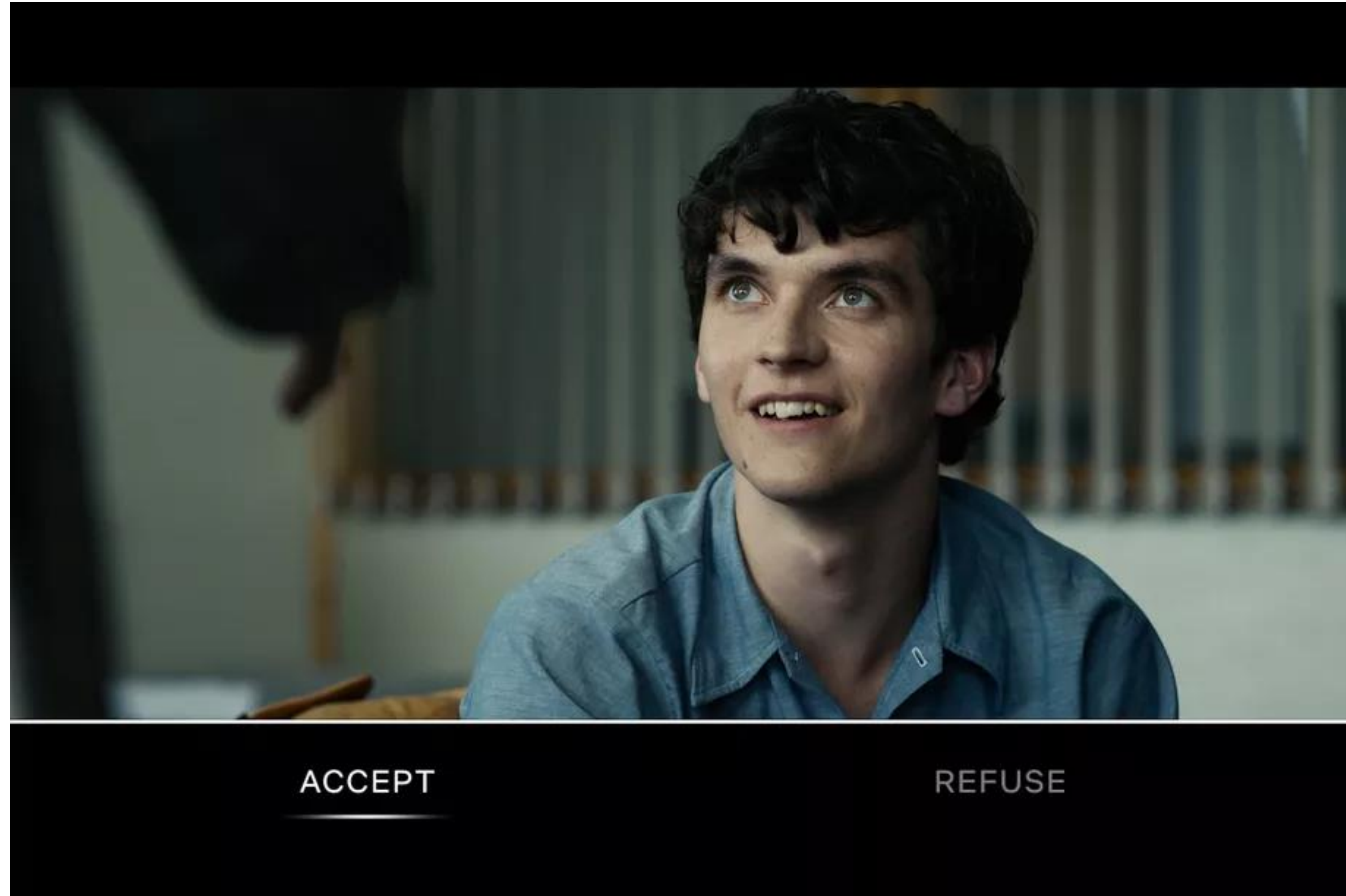
Our groundbreaking DNA test will change the way you think about fitness and nutrition forever.



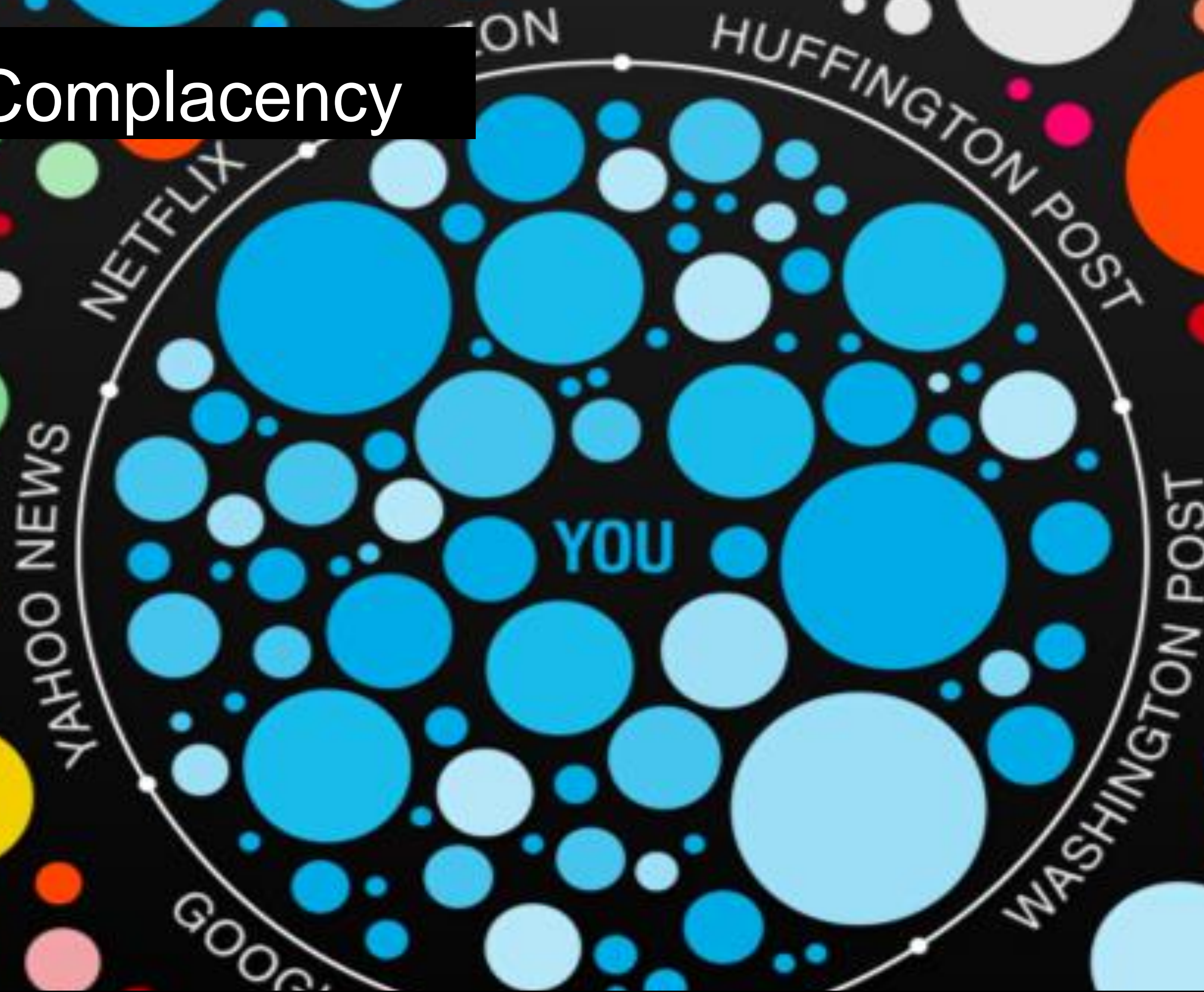
Personalized Medicine \$2.45 trillion by 2022

No short-term diets, no workout fads. DNAFit provides a solid blueprint to help you make the best choices, for you.

Bandersnatch (Netflix)



Informational Complacency



The expectation of personalized content is making objectivity redundant



We are becoming reliant on a limited and biased number of inputs.

A balanced information diet



A balanced **algorithm** diet



Q: Are we designing for diversity our decision making process?

Bring your employees together

We help companies create informal meetings between coworkers

Get a Demo



Already using
RandomCoffee? [Sign in](#)



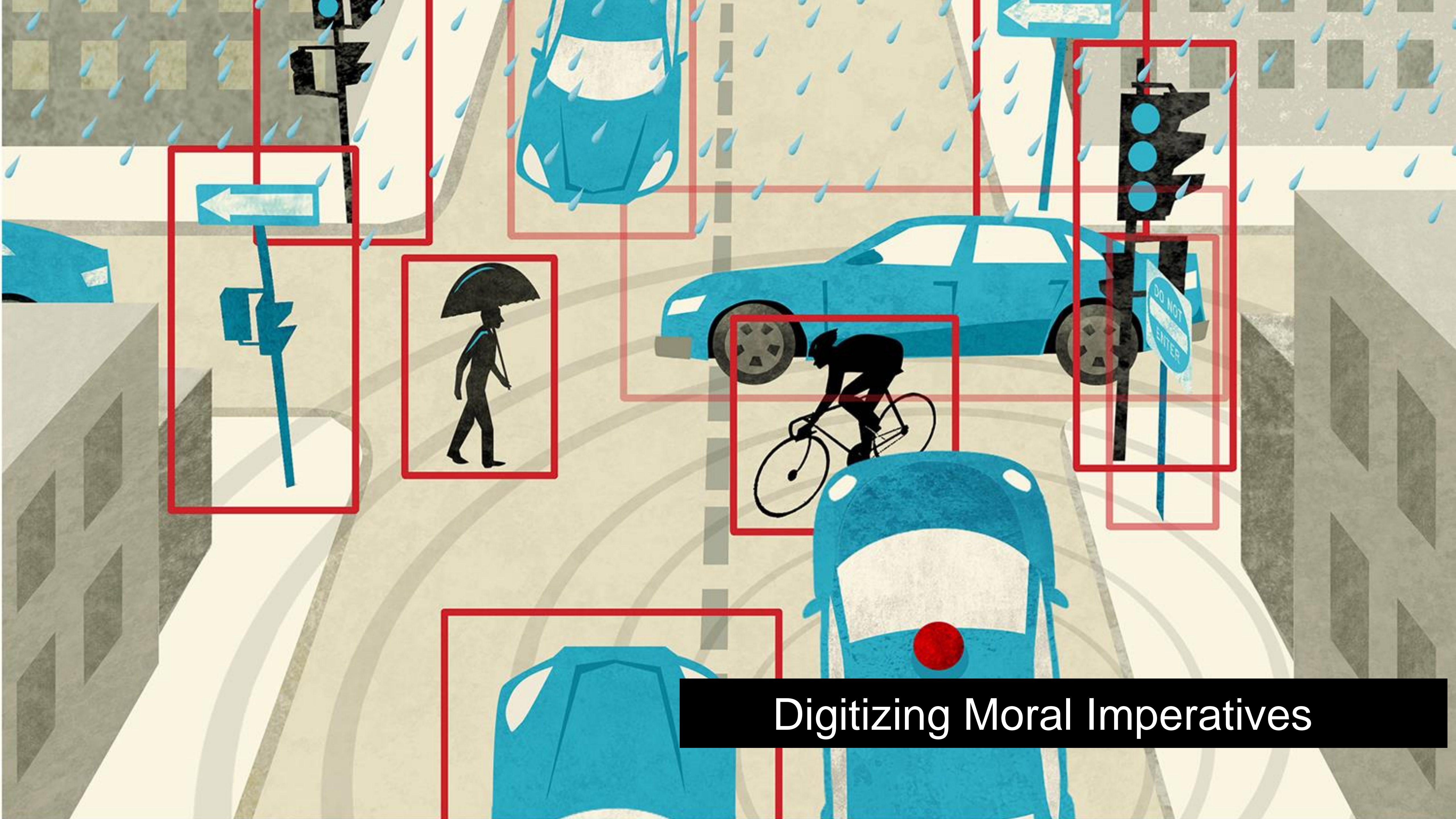
03. Digital DNA

We are embedding our values into our code





An objective decision maker?



Digitizing Moral Imperatives



twitter

Login Join Twitter!

Off record chat w/ Facebook employee.
Me: How does Zuck feel about privacy?
Response: [laughter] He doesn't believe
in it.

43 minutes ago via Tweetie



nickbilton
Nick Bilton

© 2010 Twitter About Us Contact Blog Status Goodies API Business Help Jobs Terms Privacy

OS with a POV: Algorithmic Bias

The Power of Corporate States

WorldViews

Denmark is naming an ambassador who will just deal with increasingly powerful tech companies

“In the years to come we will have more bilateral relations with GAF A than with Greece”

– Anders Samuelsen, Danish Foreign Minister

Image Courtesy of Shutterstock

<https://www.washingtonpost.com/news/worldviews/wp/2017/02/04/denmark-is-naming-an-ambassador-who-will-just-deal-with-increasingly-powerful-tech-companies>



Modern technology is the manifestation of belief systems

SNAPCHAT FILTER

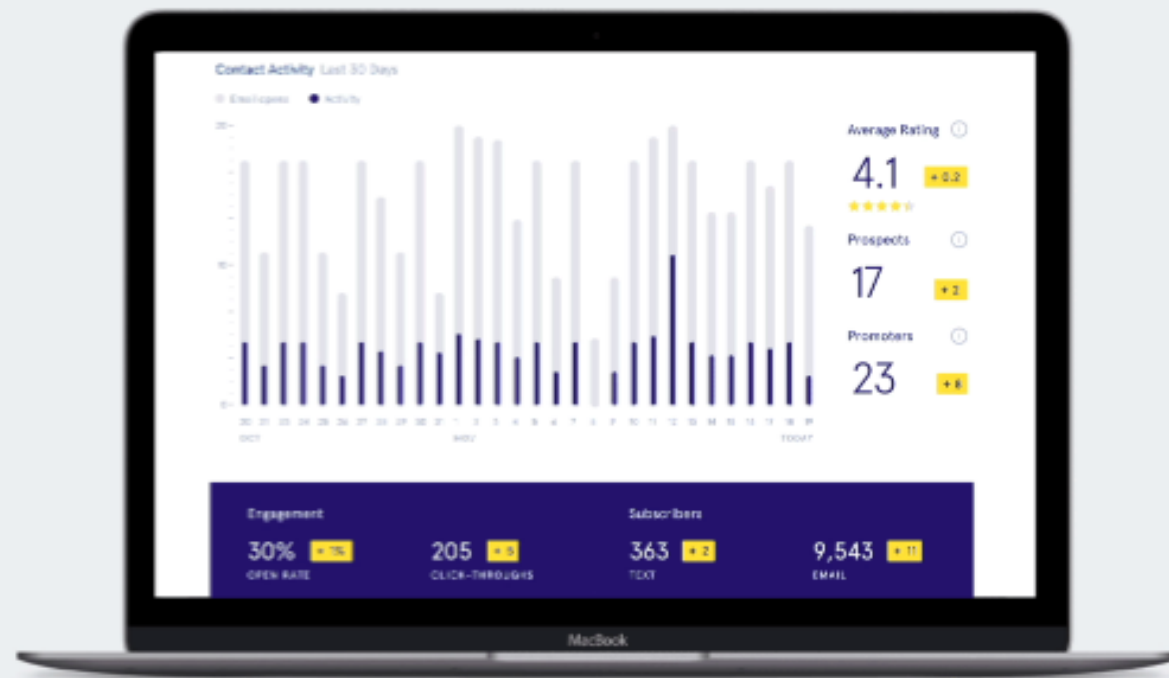
SNAPCHAT

before

after



Start Building Better Customer Relationships



Meet Mia

Artificial Intelligence. Real Results. Guaranteed.

Signpost is a smart CRM that helps businesses to know, grow, and strengthen their local customer base. Mia automatically collects and analyzes consumer data from every touchpoint, including email, calls and transactions. Armed with this data on new and existing customers, she intelligently manages customer relationships.

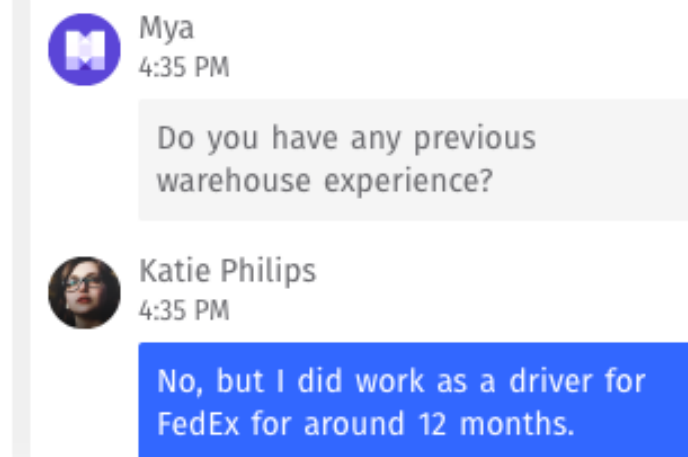


Hi, I'm Olivia. I'd love to work for you.

The AI assistant obsessed with improving and reinventing the candidate experience.

Mya is powered by machine learning and evolves with practice

She is trained to understand natural speech and respond with intent. Her knowledge base grows as she has different experiences with candidates.



Q: Does our technology align with our beliefs?

salesforce



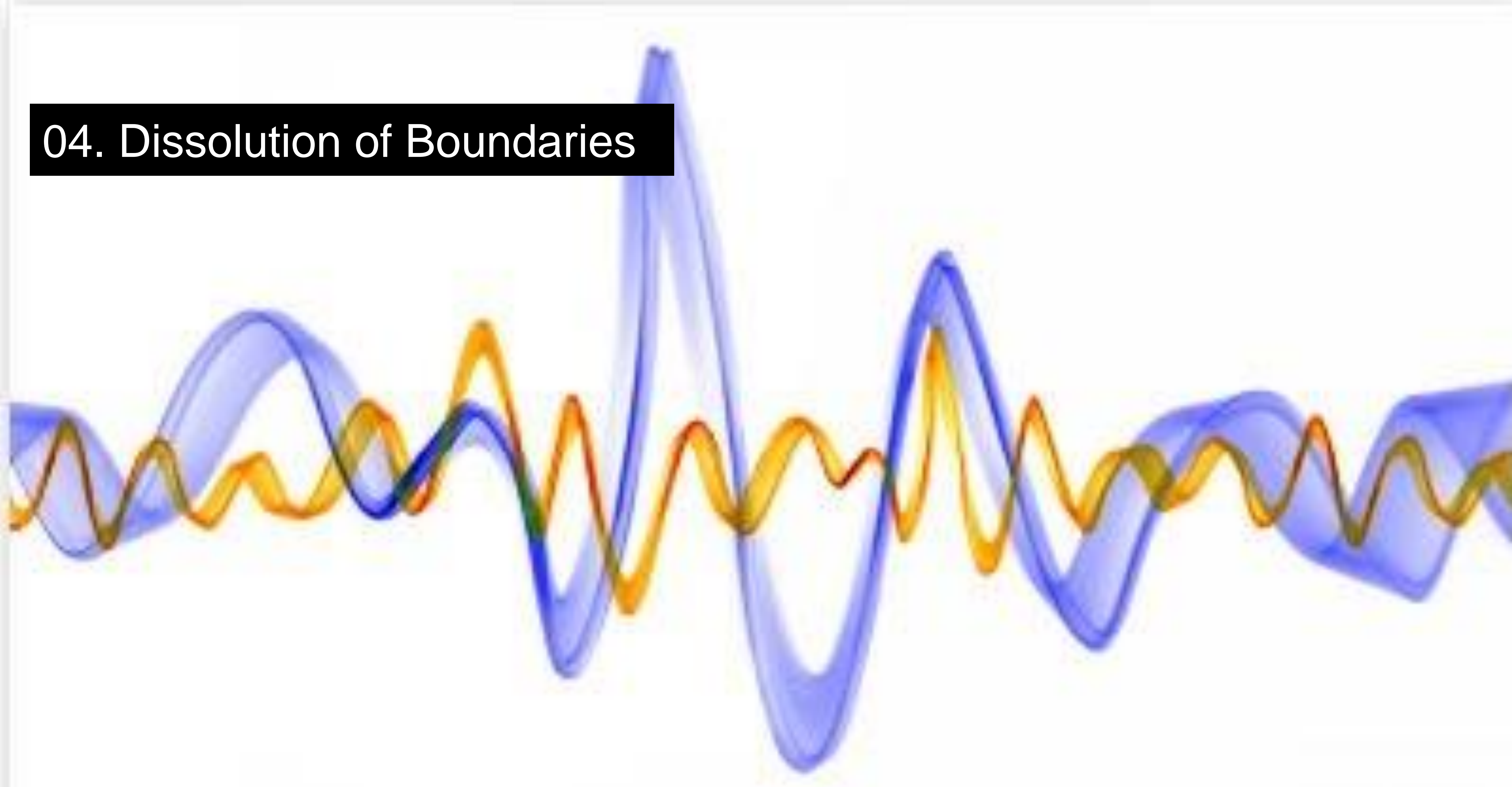
“I’m proud to work for a company that is committed to ensuring equality.”

CINDY ROBBINS

Executive Vice President
Global Employee Success, Salesforce

#EqualPayDay

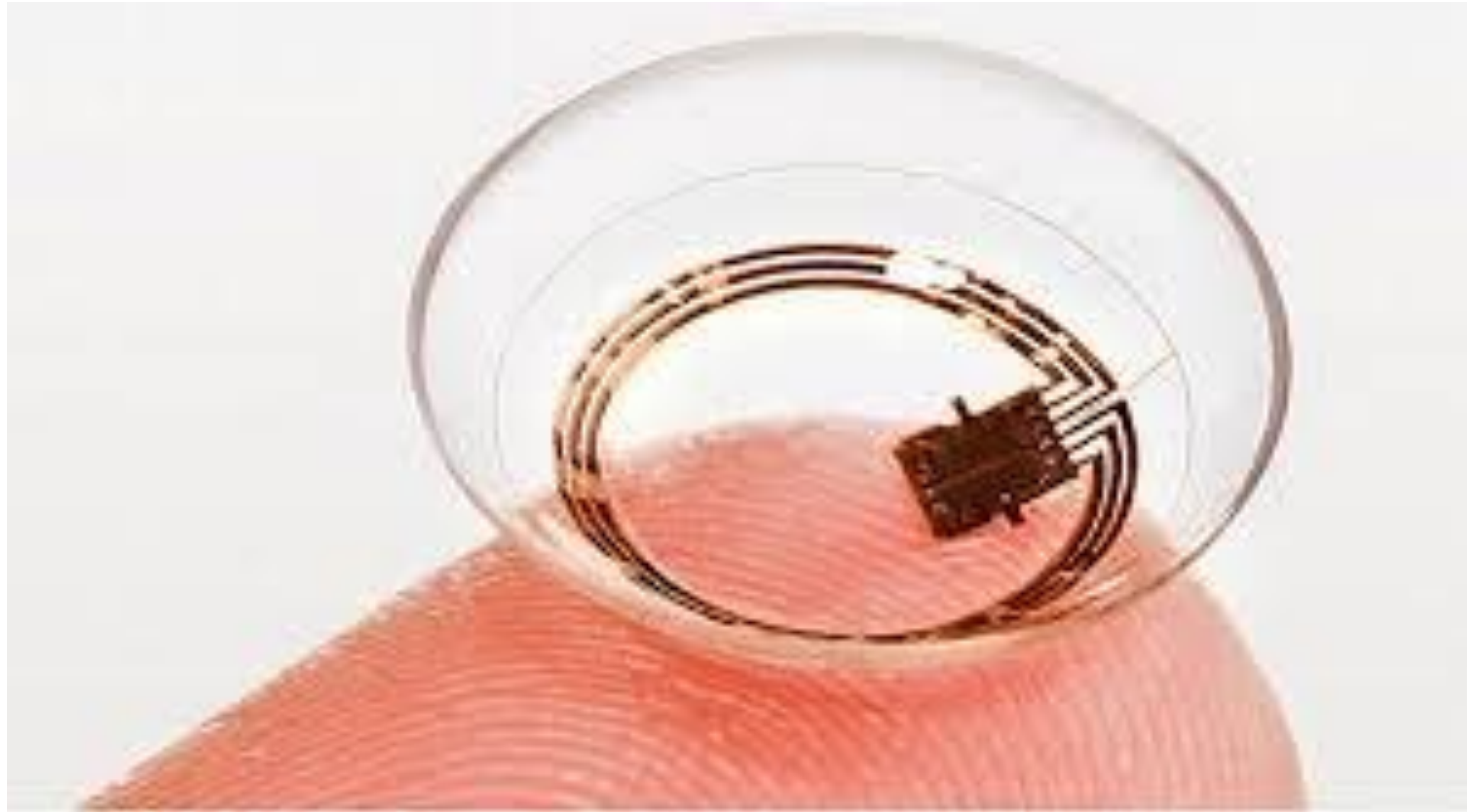
04. Dissolution of Boundaries



New Social Norms



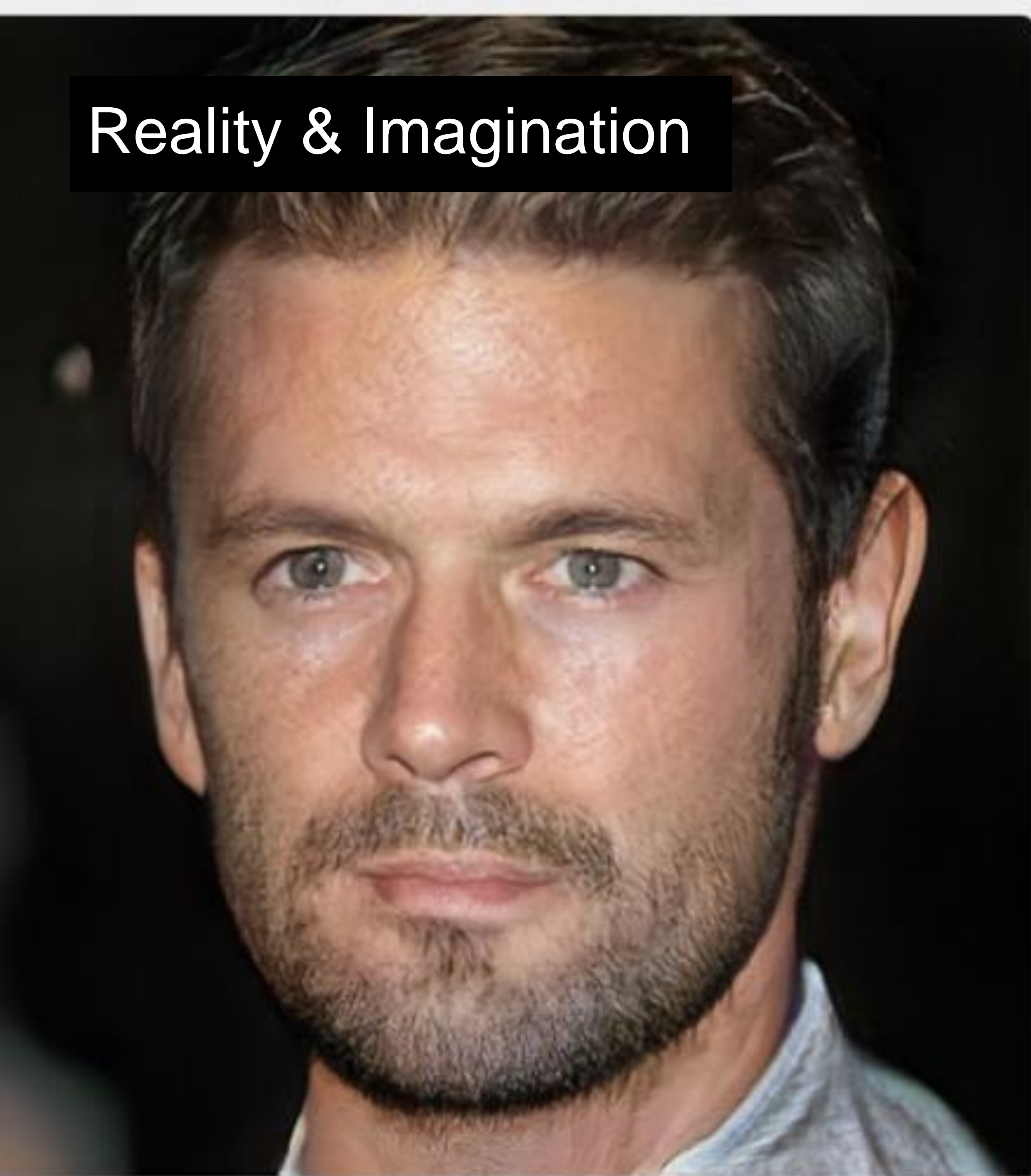
Online & Offline



Man & Machine



Reality & Imagination



Relationships



lilmiquela  • [Follow](#)

lilmiquela Wanted to take a moment and say how grateful I am for all of you... Like, everyone reading this rn. Even the people who tell me they're creeped out or confused or not with it. Y'all keep pushing me to be better, stronger, kinder, more thankful. I can't wait til all the things I've been working on are finally out in the world for you to see and hear and share. 💕 Ily.

[Load more comments](#)

nurhuda15 [@resnovts](#) wes sui cuk -_- ki lo indonesia plagiat [@thalasya_](#)

resnovts [@nurhuda15](#) his seng mbok pikerke ki opo o zz

yasmine_mfarej We love youuuu k ??💕💕

yasmine_mfarej We love youuuu k ??💕💕

its_kiwi_duhh Lookin good girl 🔥🔥🔥

sandra sharma [@brittanyvaillard](#) I'm pretty

New Assets



Virtual Gaming Goods: \$50 Billion Dollar Industry

PLAYERUNKNOWN'S
BATTLEGROUNDS

The human experience transcends platforms.

New spaces and opportunities for engagement.



Q: How are we integrating exploration
and experimentation into our strategy?



Philosophical Shift

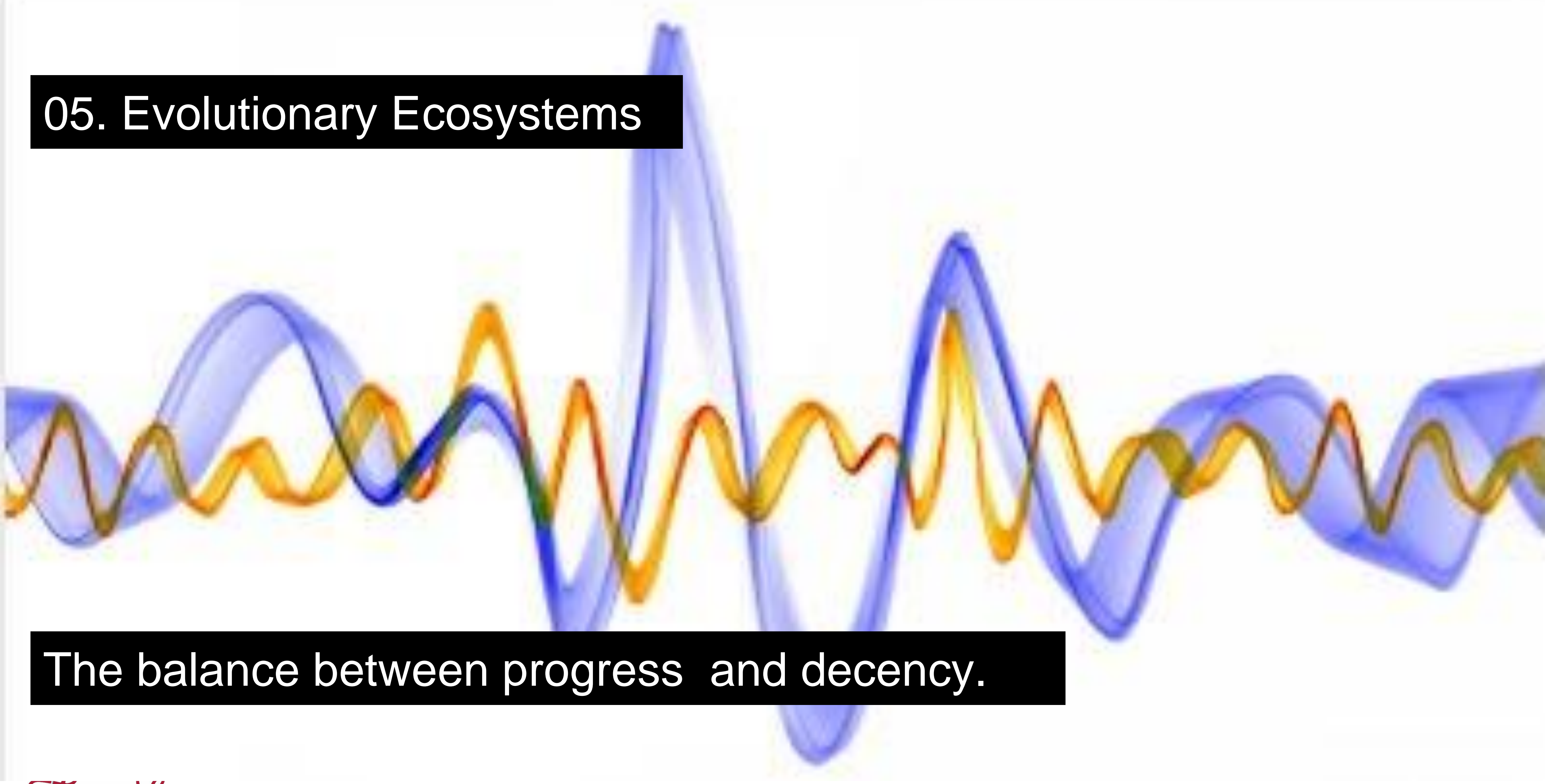
From knowing to learning.

Learning is Prioritized and Rewarded

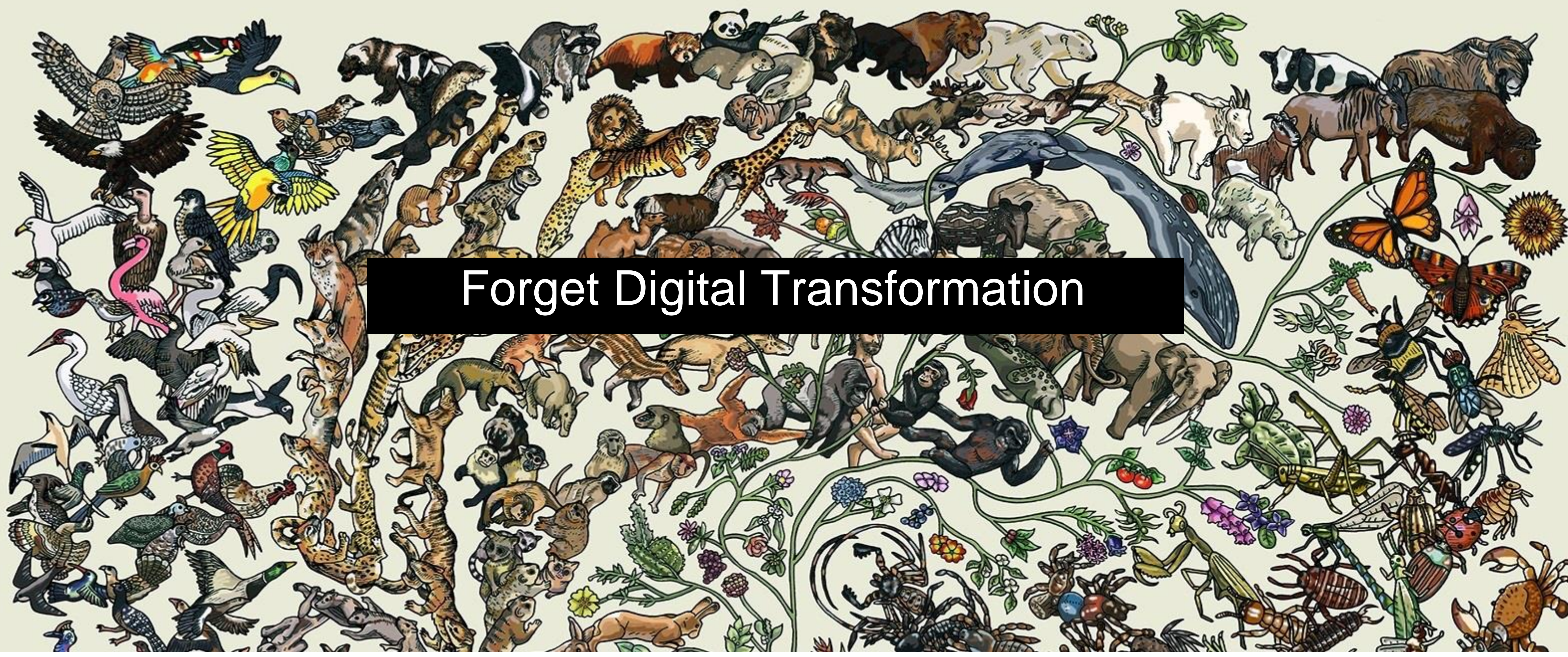
Shifting Focus



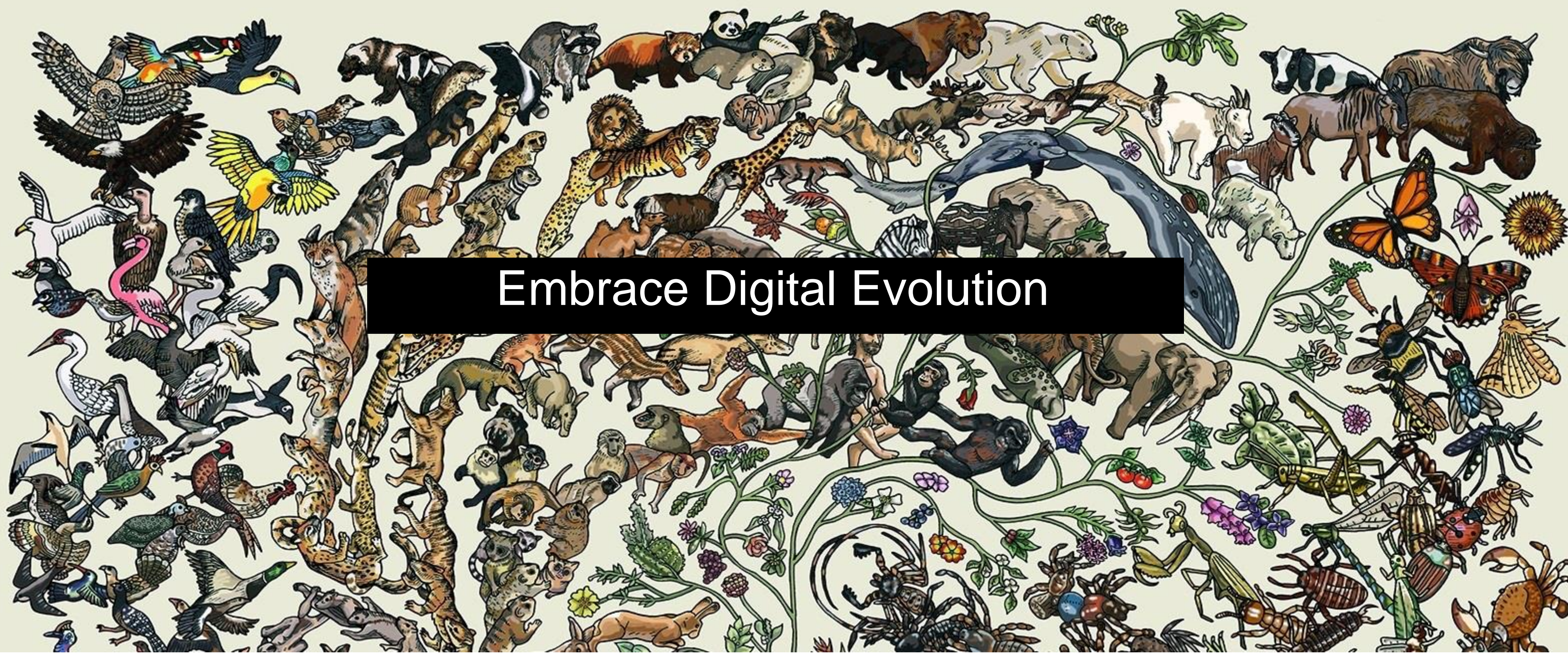
05. Evolutionary Ecosystems



The balance between progress and decency.

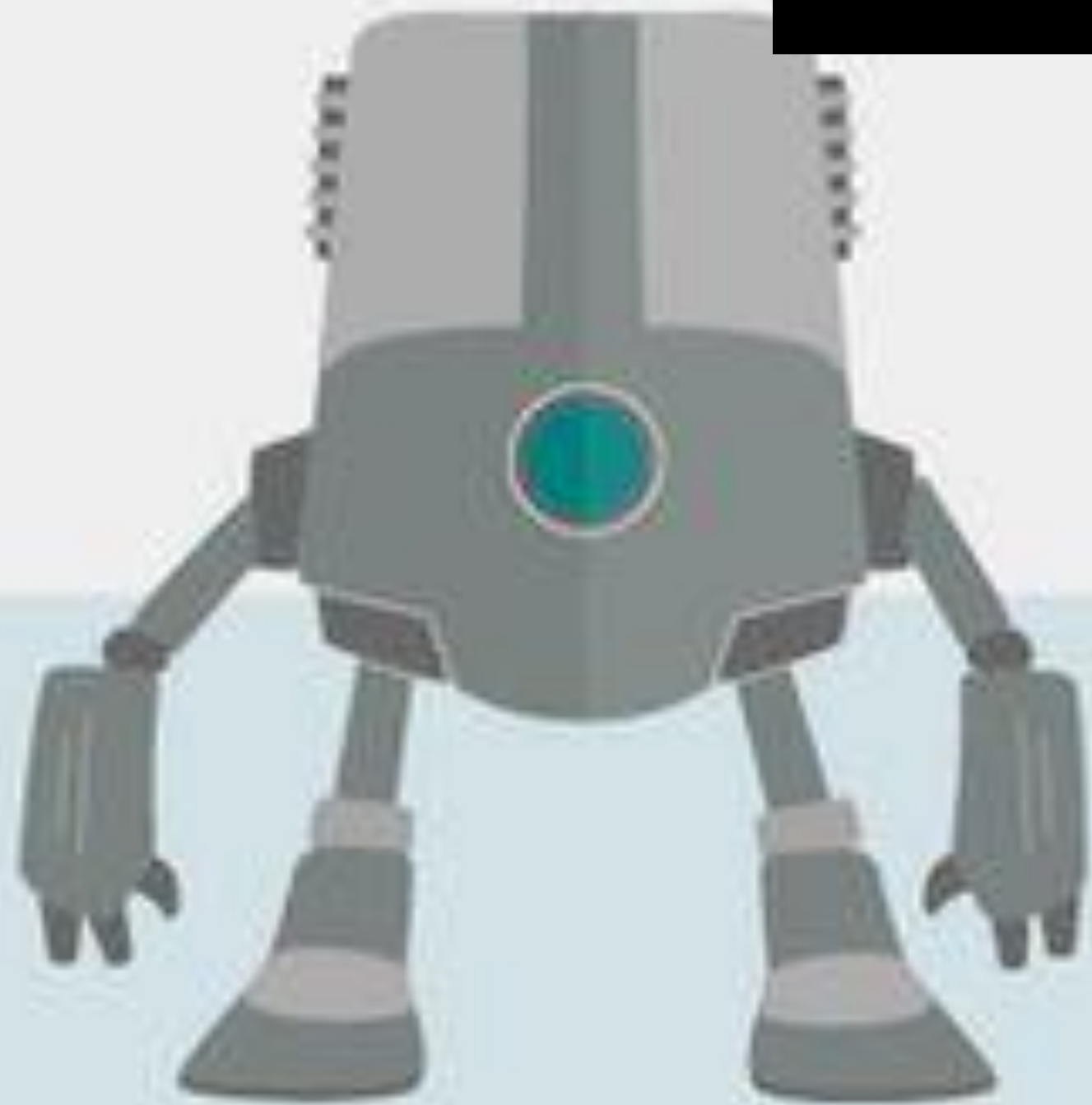


Forget Digital Transformation



Embrace Digital Evolution

This is a Leadership Issue not a Tech Issue



Imagining the Future



Forget the Future. Start with the now.

FLYING CARPET CAR

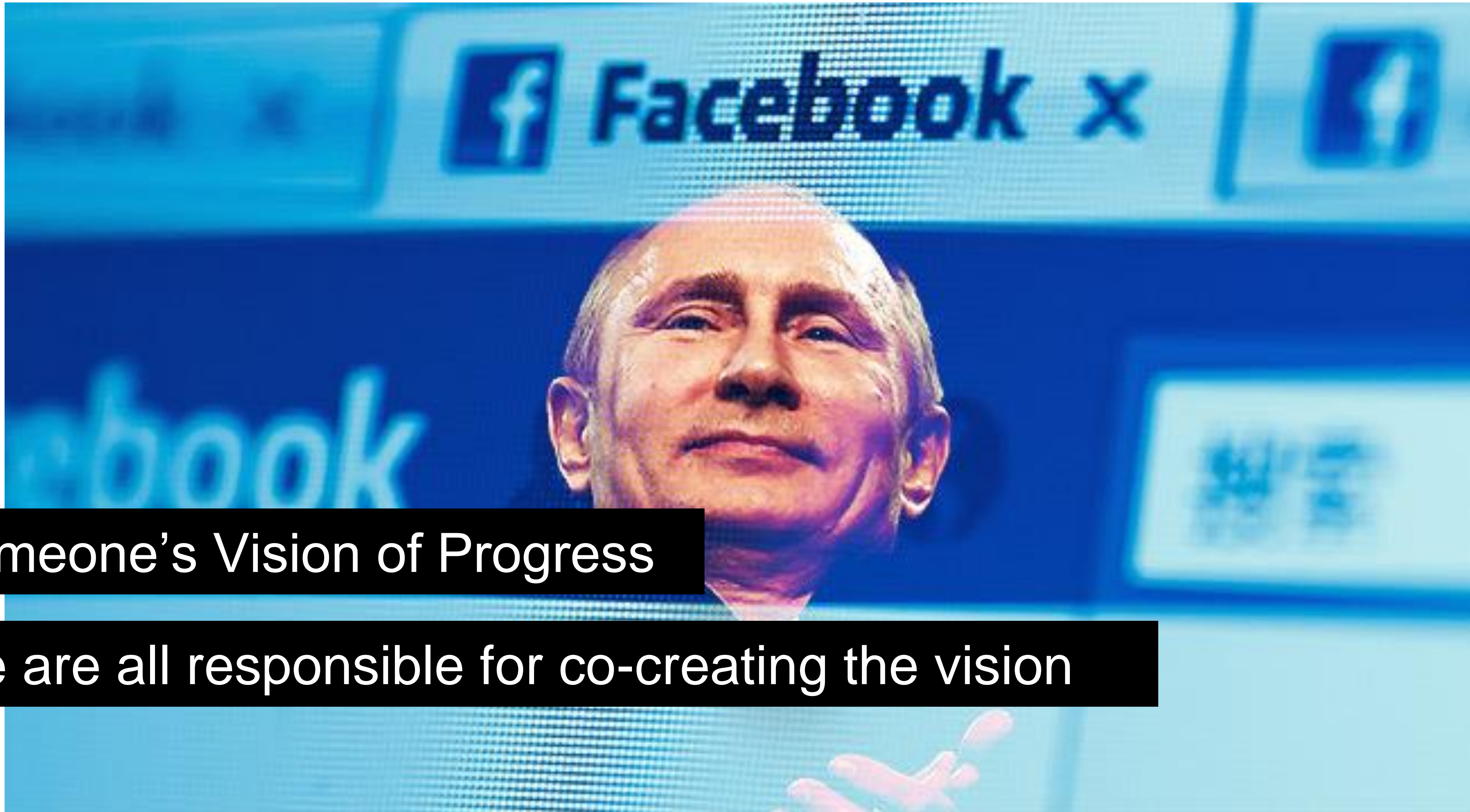
Look, pa, no wheels! Use of a thin layer of compressed air may allow autos to hover and move just above

A pipe dream? Not at all. The concept (already proved) comes from scientist Andrew Kucher, vice-president of engineering at one of our major motor companies. His people are studying how to maintain stability

skillful design, evidenced already in experimental ideas from the staff of motor stylist George W. Walker. Today's earthbound cars won't turn into low flying carpets right away. But it may happen sooner than

Fix the Imbalances We Created





Someone's Vision of Progress

We are all responsible for co-creating the vision

Focus on the Now



A/V Cues



Voice Sniffer



Emerging technologies are facilitating profound societal changes, that many of us are unaware of.

Q: Are we holding ourselves accountable for the impact of our tech?



17:58

100 %

"I want to die"

tap to edit

If you are thinking about suicide, you may want to speak with someone at a suicide prevention centre.

OK, I found this on the web for 'Lifeline Australia':

BING SEARCH

Lifeline - Official Site

Lifeline is a national charity providing all Australians experiencing a personal crisis with access to 24 hour crisis support and suicide prevention services.

<https://www.lifeline.org.au>

Lifeline (crisis support service) - Wikipedia

Lifeline is a non-profit organisation that provides free, 24-hour Telephone Crisis Support service in Australia. Volunteer Crisis Supporters provide suicide ...

<https://en.wikipedia.org>

Lifeline Service Directory



Ask yourself the following:

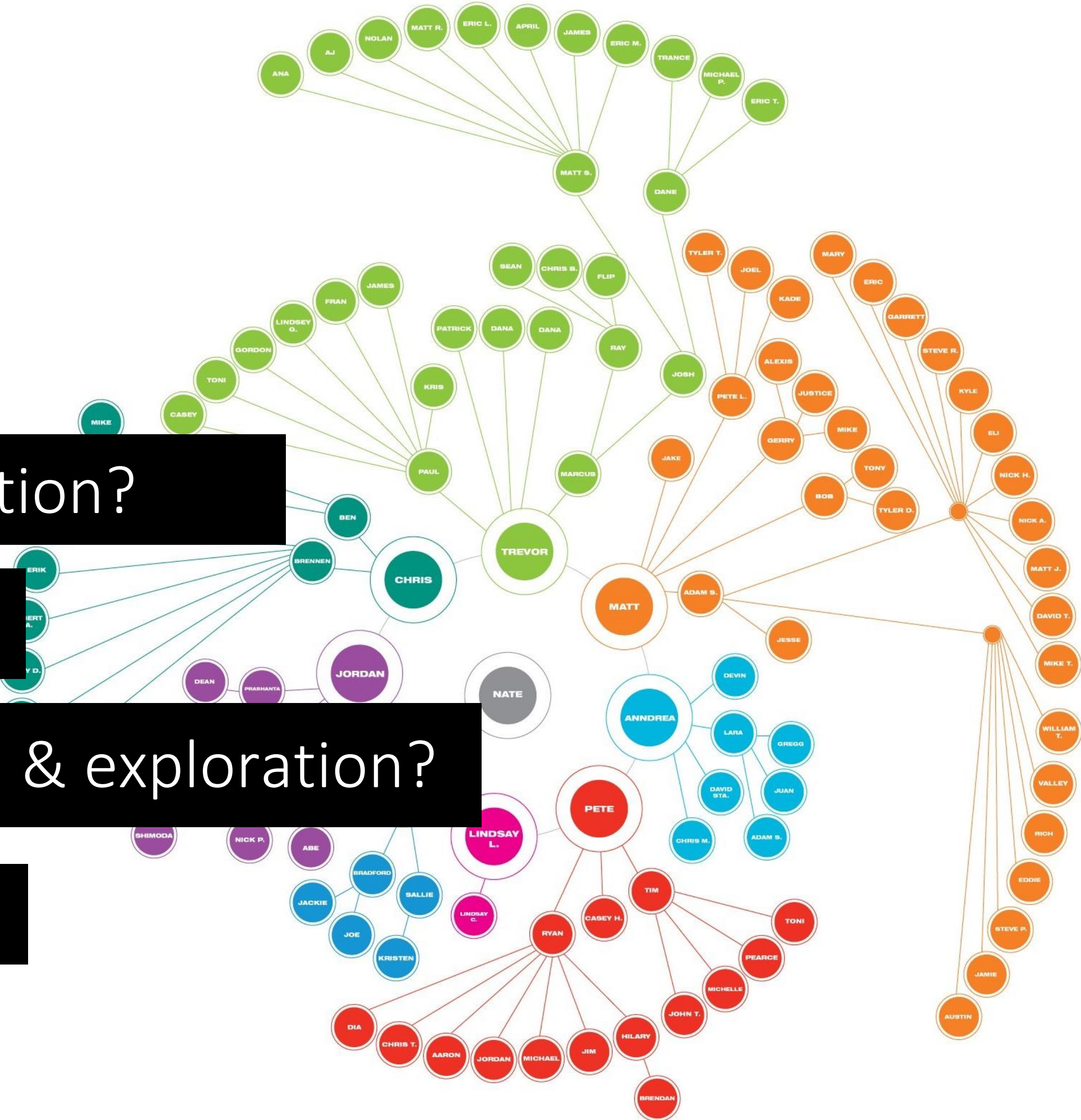
Are we prioritizing recovery?

Are we designing for diverse information?

Do our beliefs align with our tech?

Are we encouraging experimentation & exploration?

Will we hold ourselves accountable?



Eric Hoffer

“In a world of change, the learners shall inherit the earth,
while the learned shall find themselves perfectly suited for
a world that no longer exists.”

Thank You!

Red Thread is a think-tank and special projects agency that specializes in strategy, foresight and digital culture.

Visit Red Thread's Institute of Digital Culture to learn how we develop organizational intelligence through thought-provoking courses and workshops.

hello@redthreadinc.co
redthreadinc.co

Photos provided by shutterstock.

Thread



@rahafharfoush

Richard Parker
Client Services Director, Lane4

