How to Lead and Disrupt in an Experience Age

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BUCKLE UP... FAST TRACK TO THE EUTURE



IT'S NO GAME – AN AI SCRIPTED MOVIE



A ROBOT PASSED A MEDICAL EXAM



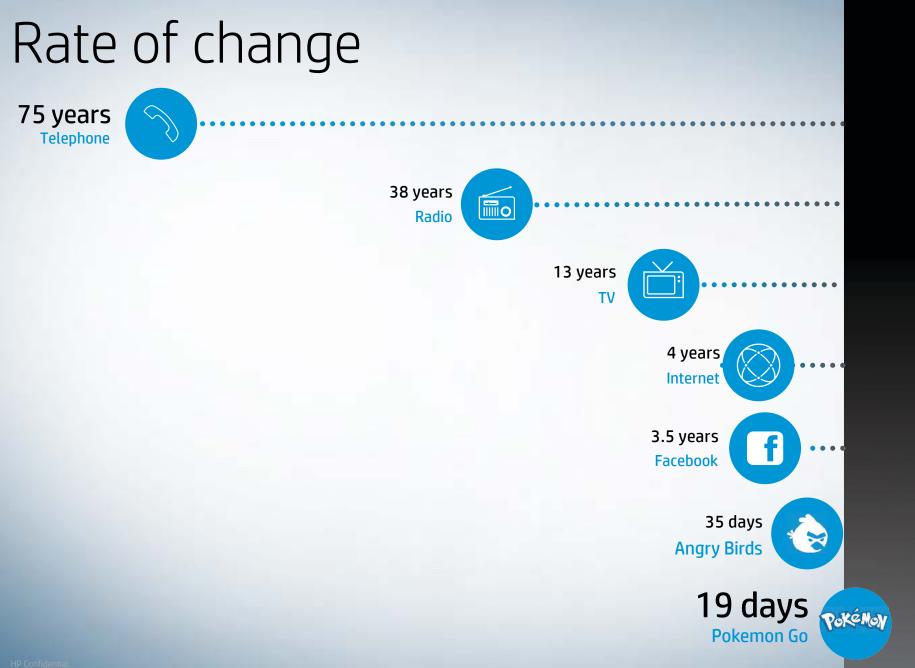
FIRST SELF DRIVING TRUCK DELIVERY

OTTO



STORE DATA ON A STRAND OF DNA





Reach Million Users

Innovations

we take for granted

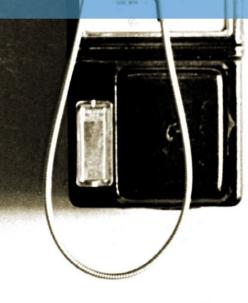




Calling from a payphone

Sending a text

VS





Leftovers in the oven

VS

Leftovers in the microwave

Going to the library

Downloading on tablet

hp

VS

Watching on a "TV set"

Watching anywhere

VS



Looking forward



MY FIRST DOG



(hp)

MY FIRST ROBOT





MY FIRST GIRLFRIEND



(hp)

MY FIRST AI CRUSH





MY FIRST CAR



h

MY FIRST FLYING CAR





MY FIRST PLANE FLIGHT



(hp)

MY FIRST SPACE FLIGHT





MY FIRST PAYCHECK



(hp)

MY FIRST BITCOIN DEPOSIT





MY FIRST CHILD



hp

MY FIRST DESIGNER CHILD





MY 80TH BIRTHDAY



hp

MY 180TH BIRTHDAY





How do we deal with all this change?



FOCUS on experiences

UNDERSTAND Megatrends



FOCUS ON EXPERIENCES



BLENDED REALITY



CUSTOMER NEEDS



INNOVATIVE APPROACH





AMAZON GO





THE PLATFORM – MULTISENSORY EXPERIENCE



SPROUT PRO IMMERSIVE LEARNING





CUTECIRCUIT SOUNDSHIRT



HP Vision

hide

PHYSICAL

Megatrends

Human experience

DIGITAL

Disruptive technologies



RAPID URBANIZATION

Massive people movement

New markets

Larger cities, more of them

New consumers, emerging markets

Small and shared spaces

New business models

Resource impact

Sustainability

350 SQUARE FEET OF LUXURY KASITA



HIGH DENSITY CITY IN CHINA THE GREAT CITY

1000000000



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CLOTHING RENTLA SERVICE RENT THE RUNWAY

CHANGING DEMOGRAPHICS

Living longer

Digital health

Lower fertility rates

Shrinking and aging workforce

Aging population

Workforce transformation

Healthcare pressure

Silver spenders



PHYSICAL SPACES ARE CHANGING HOW WE WORK CONNECTED OFFICE DESIGN



HELP WITH RECOVERY VIRTUAL NURSES

Thank you, I'm going to forward this information to your doctor.







HYPER GLOBALIZATION

Everything connected

Constant reinvention

Digital platforms and ecosystems

Collaboration across time zones and borders

Rise of the startups

Security paramount

Disrupt or be disrupted

COLLABORATE WITH COWORKERS IN VIRTUAL SPACES BIGSCREEN VR

in the state



VR SIMULATION OF LIFE ON MARS



DEEPINSTINCT DETECTS THREATS BEFORE THEY OCCUR DEEP LEARNING VS. CYBERATTACKS



ACCELERATED INNOVATION

Cheaper

Everything smarter

Faster

Automation

More powerful

Augmentation

More accessible

Personalization



THE OFFICES OF THE FUTURE SELF-DRIVING VEHICLES



EXOSKELTONS CAN HELP FACTORY WORKERS BATTLE FATIGUE FORD HUMAN AUGMENTATION

okso

udul



C. ELEGANS

DIGITAL RECREATION OF A MICROSCOPIC ROUNDWORM



Megatrends Impact on HP products















Reinvent Continually

Be clear in your mission

Have an open mind

Take action

REINIVENT NATIONS



Indonesia's Digital Transformation A journey to become the largest digital economy in Southeast Asia

LIFE SERVICES DELIVERED BY MOTORBIKE OR CAR INDONESIA RIDE HAILING



Estonia: Europe's' Digital Leader Becoming the world's most digitally advanced society



Nvidia: Business transformation From graphics processors to AI car super computers for autonomous driving



ADVANCED SELF-DRIVING CAR AND CHAUFFEUR AUDI CAR OF THE FUTURE

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 (E) Cami de la Foixarda, Barcelona, 08038

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12:21

Amazon: Beyond boxes Groceries, artificial intelligence, media and more



HP Reinventing HP Digital transformation from the inside, out

DISRUPTIVE TECHNOLOGIES

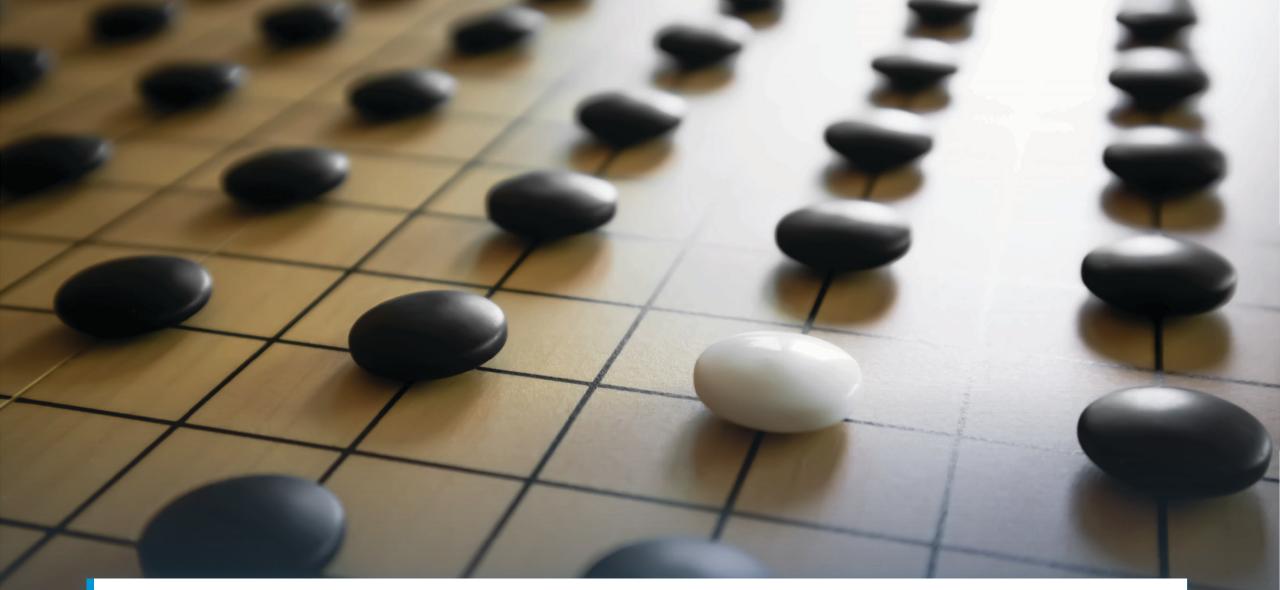
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

BLOCKCHAIN

DIGITAL MANUFACTURING



ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING



AI BEATS WORLD GO CHAMPION



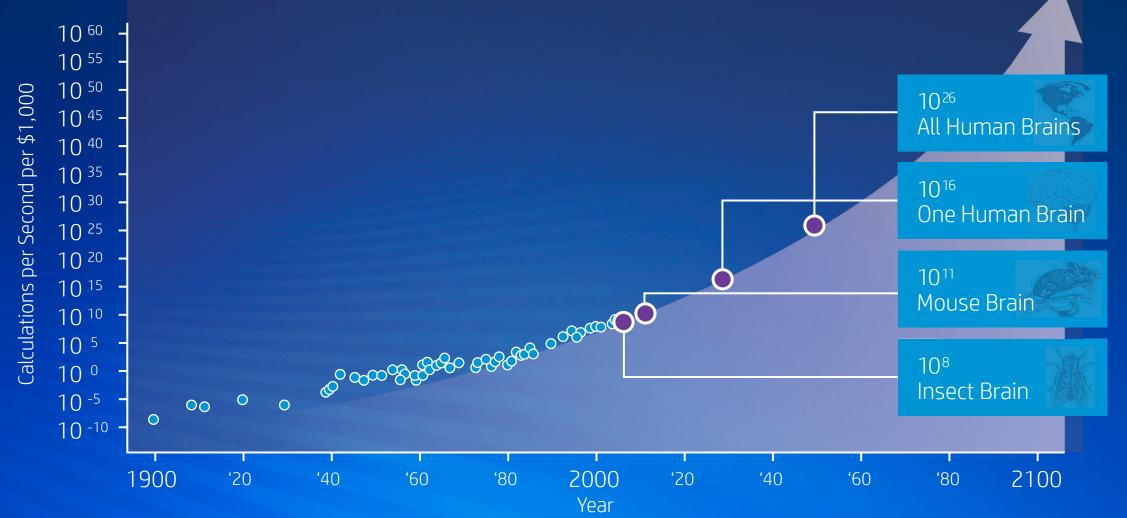


AI SOLVES 100 YEAR OLD SCIENCE PUZZLE



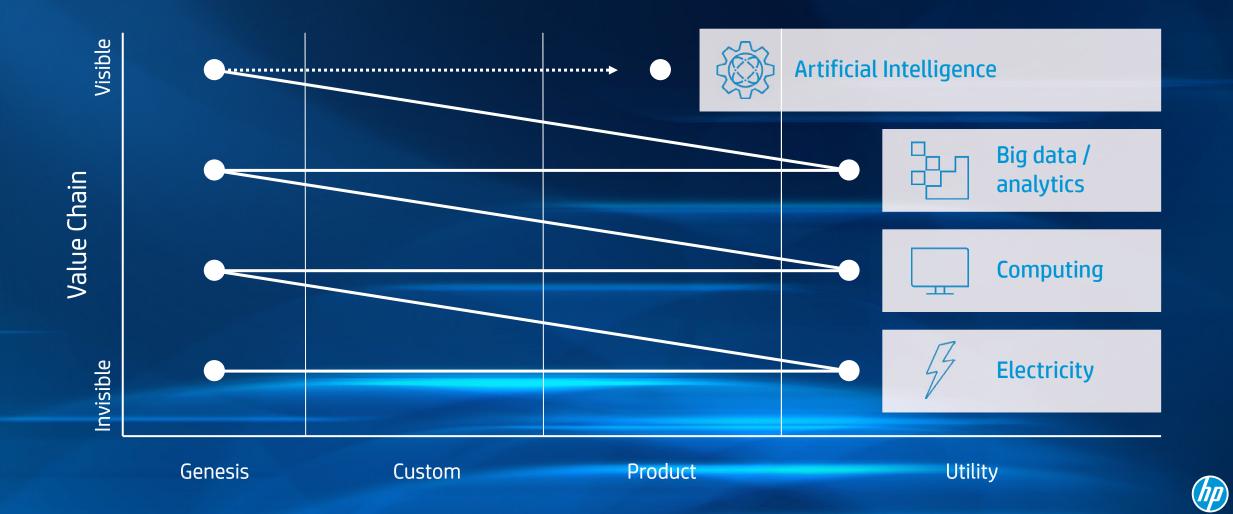
THE SINGULARITY

Exponential growth of computing



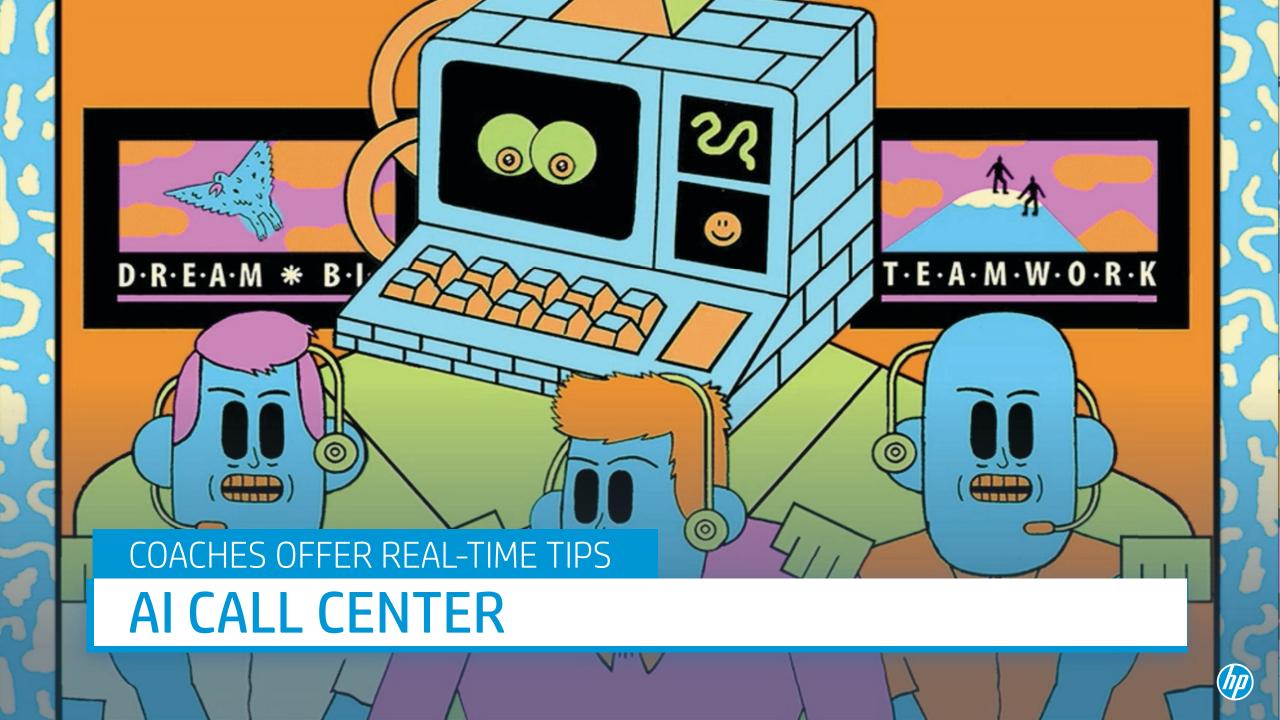
ALIS THE NEW ELECTRICITY

Everything we formerly electrified will be cognified



COGNITIVE COMPUTING DIAGNOSTICS OF RARE DISEASES







AI REPLICATES SHIRT MEAUSUREMENTS FROM A PHOTO AI TAILOR

-144

-115-



WHY NOW?



BIG DATA

$= \frac{N}{n} \left(1 - \frac{n}{N}\right) \left[\sum_{i=1}^{N} t_i^2 - \frac{1}{N-1} \sum_{i=1}^{N} \sum_{\substack{k=1\\k\neq i}}^{N} \frac{N}{(N-1)} \left(1 - \frac{n}{N}\right) \left[(N-1) \sum_{i=1}^{N} t_i^2 - \sum_{\substack{k=1\\k\neq i}}^{N} \frac{N}{(N-1)} \left(1 - \frac{n}{N}\right) \left[N \sum_{i=1}^{N} t_i^2 - \frac{N}{2} \right]$

ALGORITHMS

008

JODOCO

SCALE COMPUTING



HELP WANTED: JOBS FOR ROBOTS AND AI

Jobs humans can do, but robots do better Jobs humans can't do, but robots can Jobs we didn't know we wanted done Jobs only humans can do – at first







Here is the first TV ad by McCann's Al-CD β



YOUR NEXT BOSS COULD RUN ON CODE



Humans disrupted?

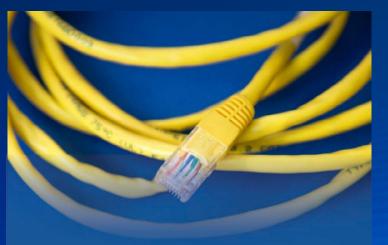
Corporate taxes to offset pensions Government mandated universal income Robots get "labor" rights Humans pursue mass leisure Tactile and emotional job requirements



BLOCKCHAIN AND CRYPTO ASSETS



SOFTWARE DESIGN CAN CHANGE THE WORLD



INTERNET EARLY YEARS



INTERNET TODAY

• Open protocols

- Decentralized
- Nobody owns/controls

- Closed services
- Winner take all
- Centralized



INTERNET TOMORROW





WHAT IS BLOCKCHAIN?



DISTRIBUTED LEDGER OF TRANSACTIONS



CRYPTOGRAPHY



DECENTRALIZED TRUST



HOW DOES BLOCKCHAIN WORK

Think of it as a shared record book



HOW DOES BLOCKCHAIN WORK

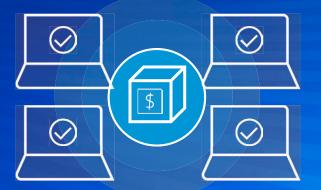
Think of it as a shared record book

money to Amir



transaction (a 'Block')

That line item goes to 100s of other computers that have a copy of the record book



Those other computers agree the transaction is legitimate and approve it



The approved transaction is confirmed in the record book and can never be changed

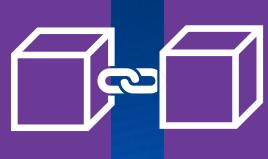


Amir happily receives his money



HOW IS BLOCKCHAIN DIFFERENT

A way to agree on content without anyone owning it (the blockchain)



A way of compensating people to make a blockchain based service more valuable (crypto assets)



Democratize & decentralize transactions



Transparent & immutable



Private & public transactions



Secure



More resiliant than centralized systems



BLOCK CHAIN IS MORE THAN CURRENCY





EXAMPLES



BLOCKCHAIN - RETAIL



LIMITED RELEASE NINTENDO 64



CONSUMER DEMAND



LONG LINES

The second s

SCALPERS

VOUCHER FRAUD

BLOCKCHAIN - RETAIL



LIMITED RELEASE NINTENDO 64



Controlndistmesution

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Vaciablel pricing

BLOCKCHAIN

Seconenterfieiter vouchers





CONSUMER DEMAND



LIMITED RELEAS

RIDESHARING IN A BLOCKCHAIN WORLD

"I'm at the corner of Stockton and Sutter and need a ride now"



Lau needs a ride and posts her request to the Transit Blockchain



The "Transit" protocol then sends out a message to all kinds of Blockchain service drivers



Lau can then choose which mode she prefers



And pays with Transit Crypto Tokens



As an early adopter Lau has received tokens for using the Transit blockchain



Crypto tokens can be used to pay for transit or sold on the open market.



WHAT IS BLOCKCHAIN?

INTERNET EARLY YEARS

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INTERNET TODAY

INTERNET TOMORROW





WHAT IS BLOCKCHAIN?

INTERNET EARLY YEARS





INTERNET TODAY

INTERNET TOMORROW

- Support for open protocols
- Egalitarian, decentralized
- Business model disruption



DIGITAL MANUFACTURING



Digital manufacturing is driving the next Industrial Revolution







Pre-Industrial Handmade and time intensive

Industrial Revolution Blueprint design & mass production

Internet Computer-aided design and JIT machine production **3D transformation** Immersive design and digital production

3D))

Next Industrial Rev

Democratization of design and ubiquitous production



1780s to 1860s



1870s to 1960s



1970s to 2010s



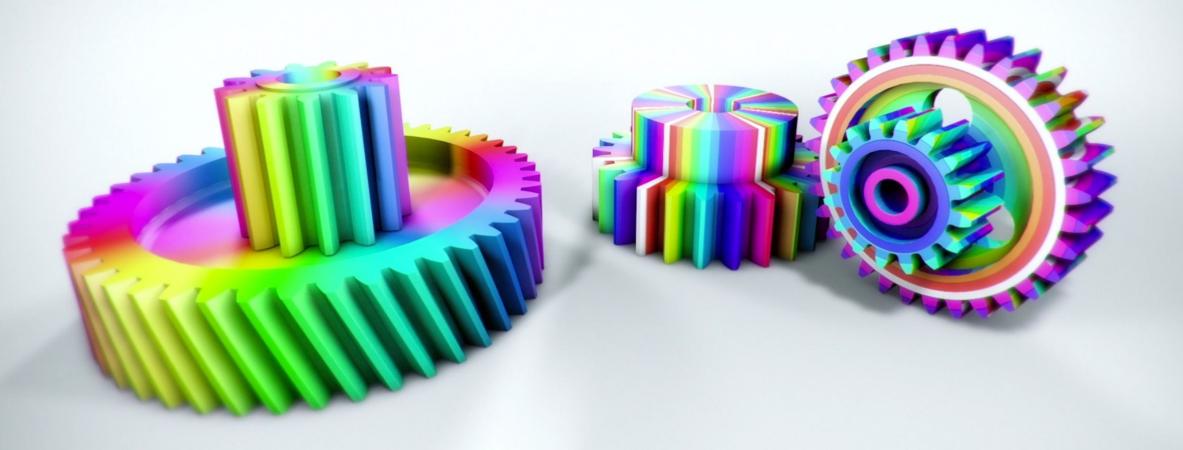
TODAY



2010s – Future



The mighty HP voxel





FUTURE OF 3D PRINTING



file.excep catch(...)





FOCUS on experiences

UNDERSTAND Megatrends



Disruptive technologies are not always obvious

Technology's history is littered wrong predictions, often made by very smart, successful – and wealthy – executives

1864

(referring to Trains) No one will pay good money to get from Berlin to Potsdam in one hour when he can ride his horse there in one day for free.

- King William I of Prussia



Disruptive technologies are not always obvious

Technology's history is littered wrong predictions, often made by very smart, successful – and wealthy – executives

1946

Television won't be able to hold on to any market it captures after the first six months. People will soon get tired of staring at a plywood box every night.

- Darryl Zanuck, 20th Century Fox

1876: Telephone flaws: William Orton, President of Western Union **1878:** End of electric light: Erasmus Wilson, Oxford Professor 1903: Horses will outlast cars: Horace Rackham, bank advisor warning Henry Ford

1916: t Film not as compelling as stage: Charlie Chaplin, actor, producer, director **1921:** Radio has no value: Associates of David Sarnoff, radio investor

Disruptive technologies are not always obvious

Technology's history is littered wrong predictions, often made by very smart, successful – and wealthy – executives

2007

There's no chance that the iPhone is going to get any significant market share.

- Steve Ballmer, Microsoft CEO

1876: Telephone flaws: William Orton, President of Western Union **1878:** End of electric light: Erasmus Wilson, Oxford Professor **1903:** Horses will outlast cars: Horace Rackham, bank advisor warning Henry Ford

1916: st Film not as compelling as stage: Charlie g Chaplin, actor, producer, director 1921: Radio has no value: Associates of David Sarnoff, radio investor 1959: Limited potential of copy machines: IBM told Xerox founders **1981:** Cellphones won't replace wire

phones: Marty

Cooper, inventor

1992: Smart phones are a pipe dream: Andy Grove, former Intel CEO



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"When all think alike, then no one is thinking." -Walter Lippman





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keep reinventing