

# Envisioning the Future



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Designing the Future Summit 2019

lppd  Lean Product &  
Process Development

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Have bold visions of the future  
and the means to act on them.

Part 1:

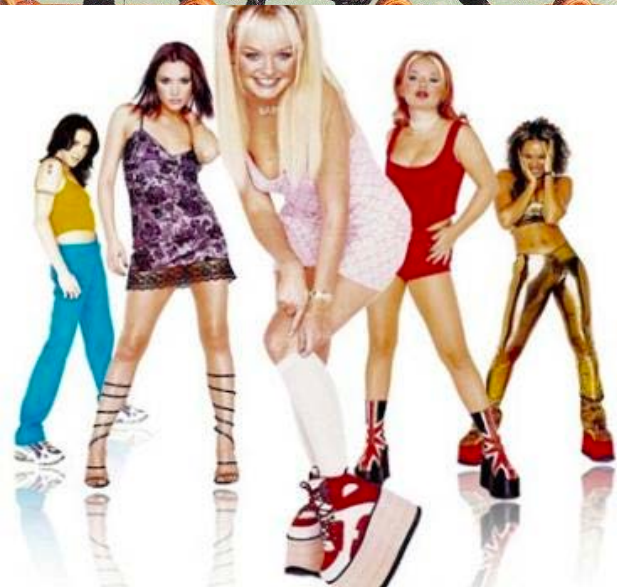
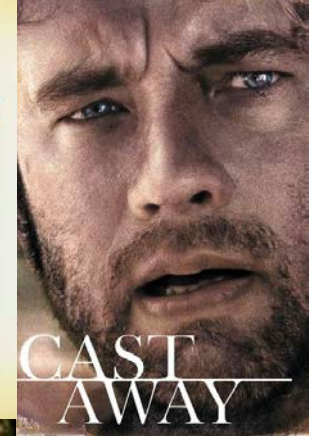
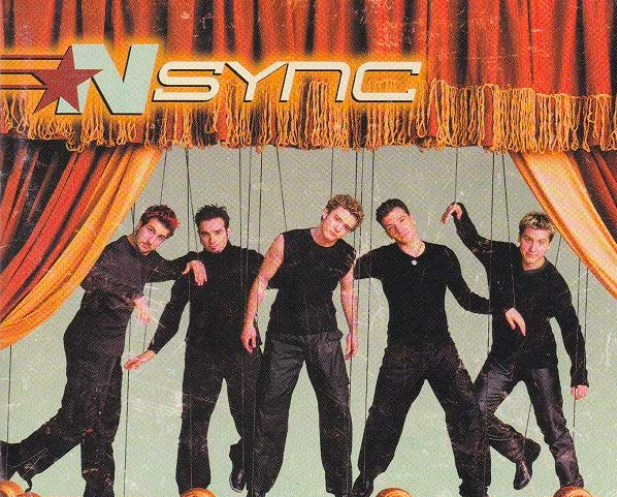
# We are living in the Future



Part 1:

We are living in the Future

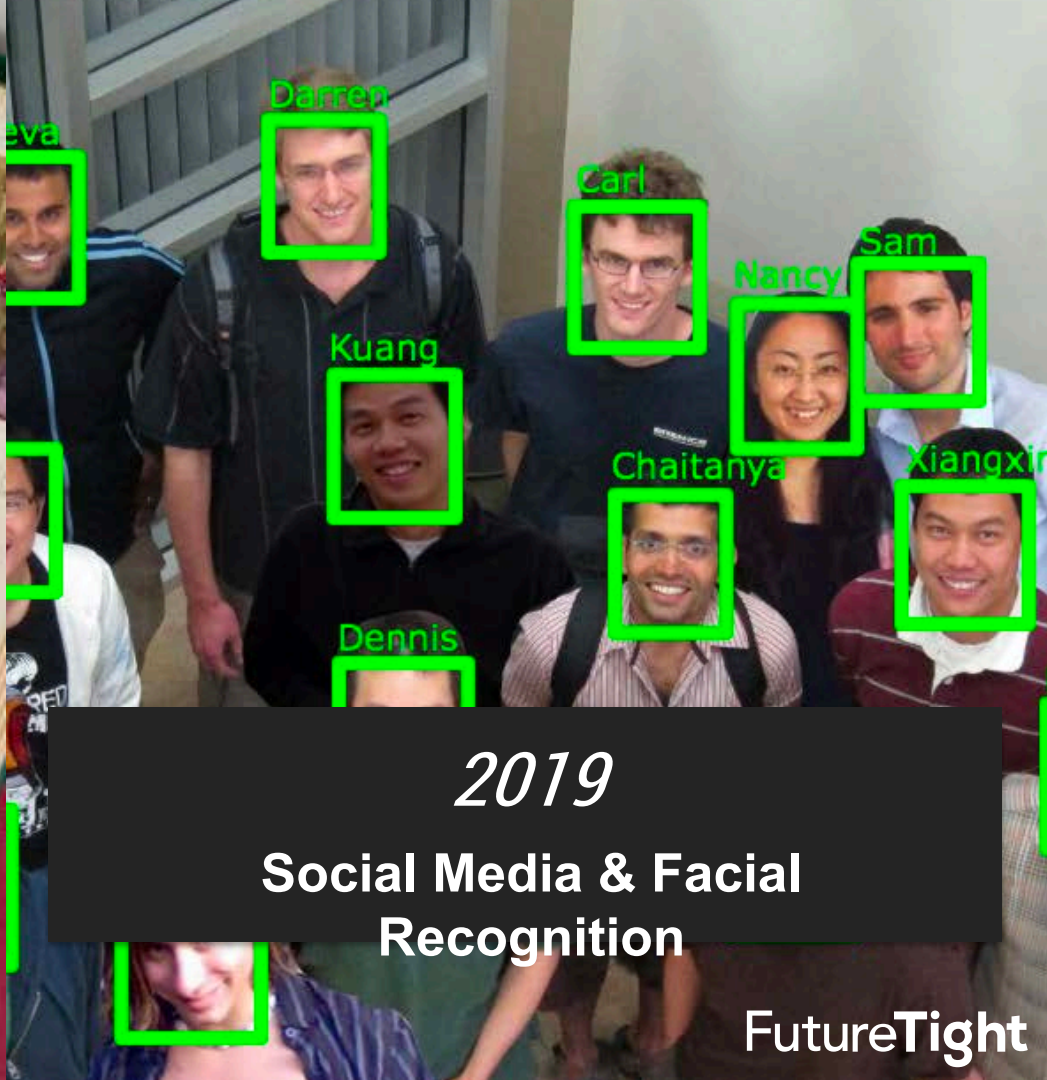
Remember 2000...





*2000*

**Photo Albums**



*2019*

**Social Media & Facial  
Recognition**

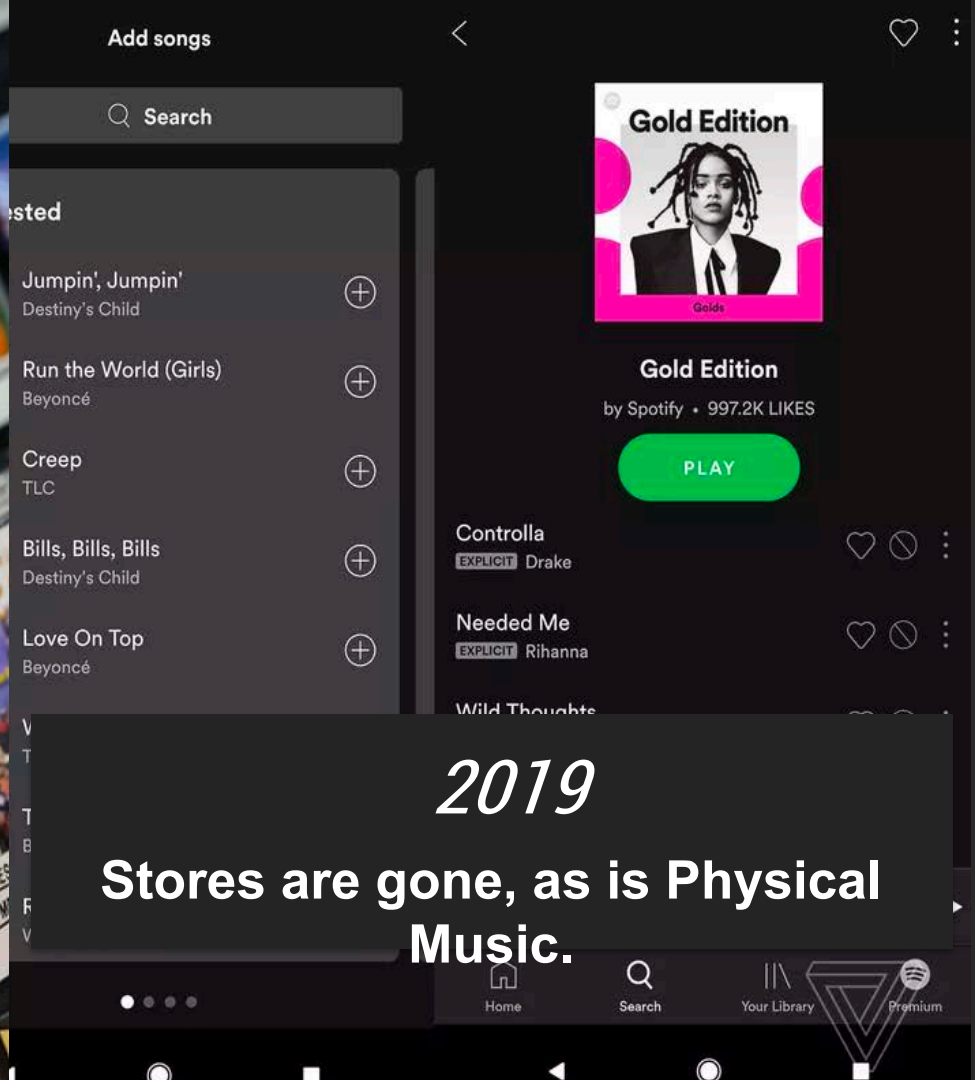
**FutureTight**



*2000*

Buying CDs in Stores

FutureTight



*2019*

Stores are gone, as is Physical Music.





*2000*

**In-Earth Orbit**



*2019*

**Reusable Rockets for Mars**





*2000*

**Half of US Adults are Online  
(Work)**

**FutureTight**



*2019*

**Almost Everyone, All the Time**

So we are living in the future.  
But you can say the same for  
the generations before.

We were also living in the Future  
in the early 90's

**1960s vs 1990s**



*1960s*

Seeing a Movie as a Special Occasion

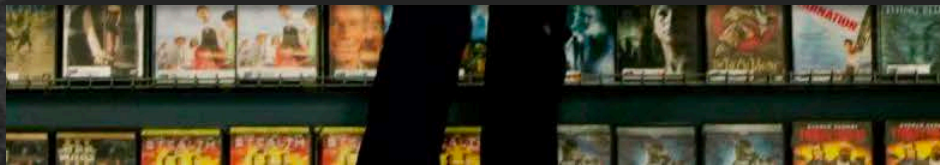


FutureTight



*1990s*

Seeing Any Movie, Anytime





*1960s*  
Landline



*1990s*  
Mobile



*1960s*

Goal set: "We go to the Moon"



*1990s*

Science Gathering Robots on Mars

**The same is true for the  
1930s, the turn of the  
century and so forth.**

**These things were once preposterous.**



**These things were once preposterous.**

**But, if you look closely, the  
preposterous was already present.**



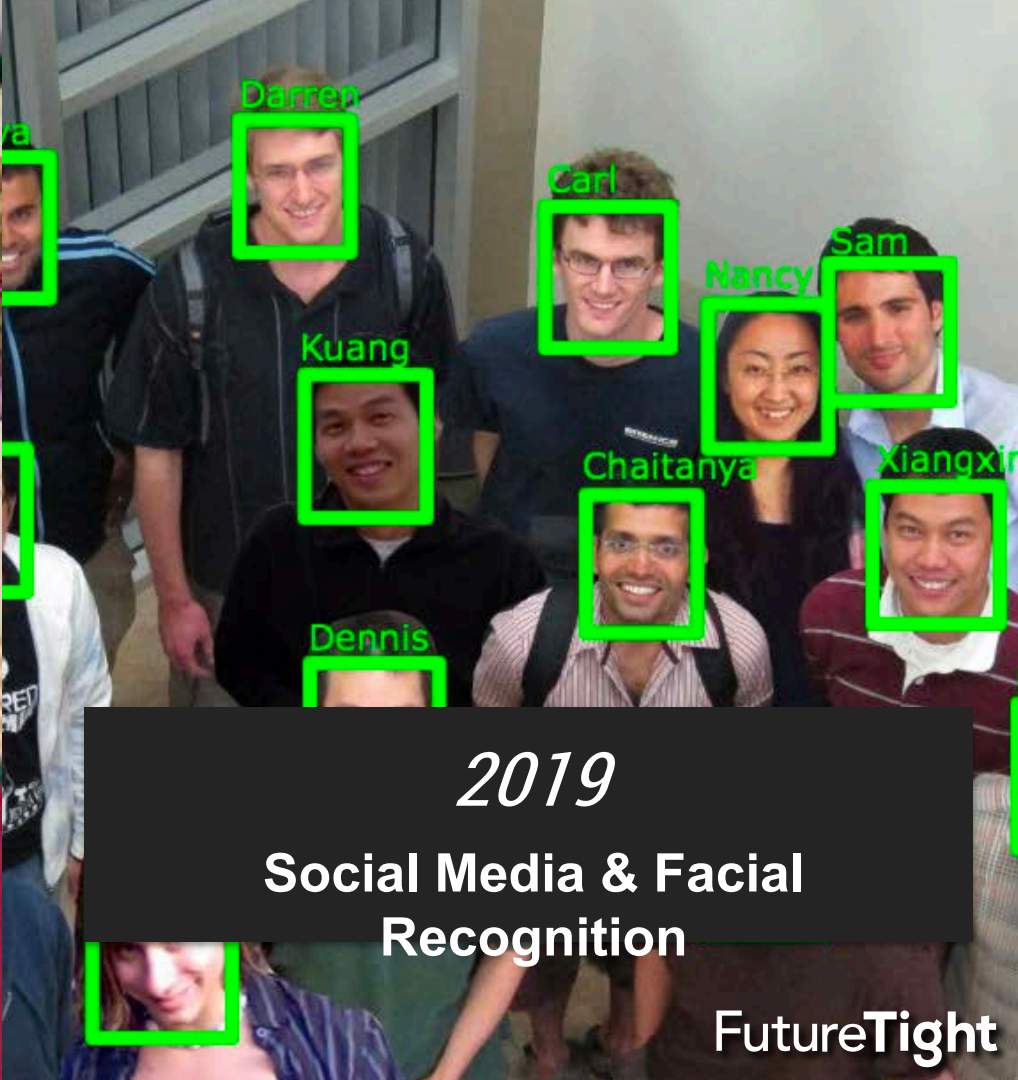
“The future is already here – it’s just not evenly distributed.”

—William Gibson, quoted in *The Economist*,  
December 4, 2003!



*2000*

**Photo Albums**



*2019*

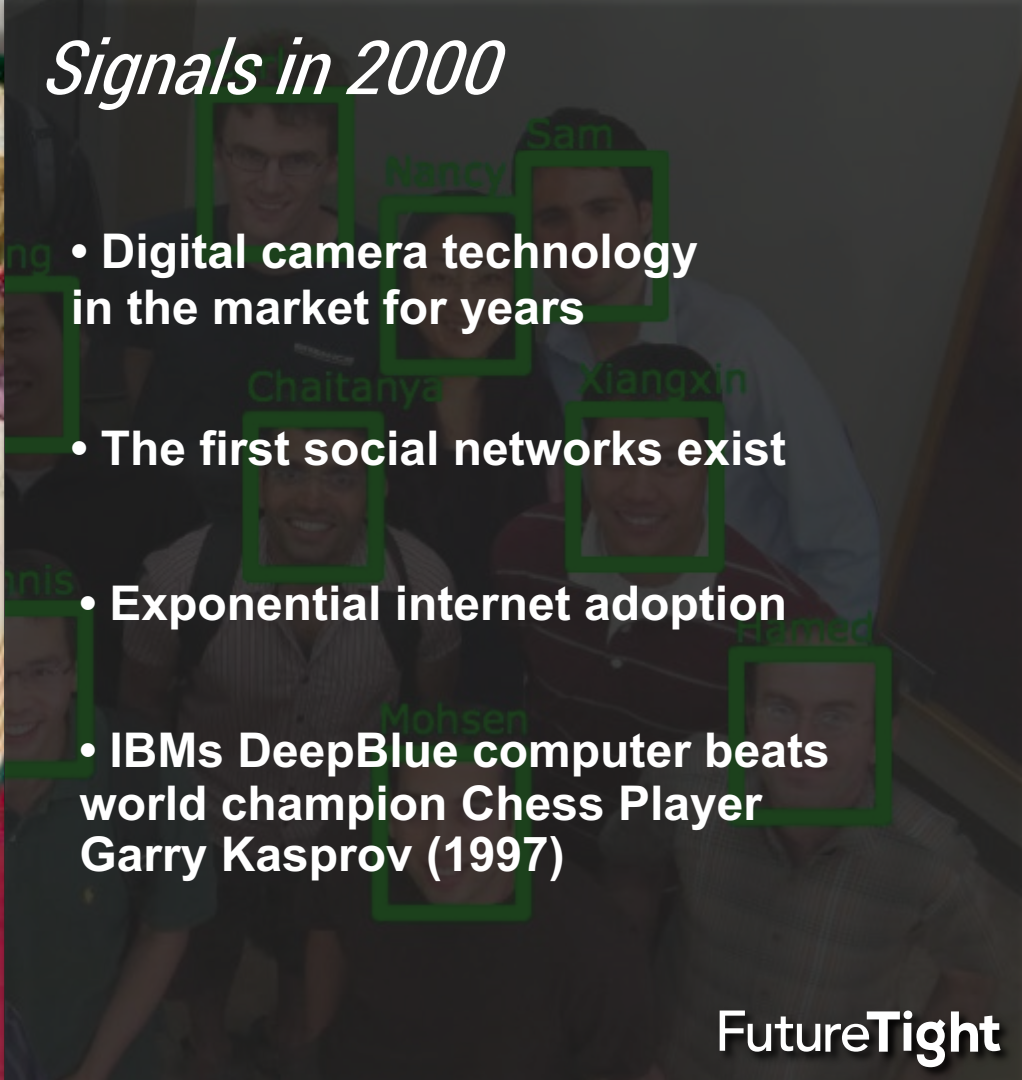
**Social Media & Facial  
Recognition**

**FutureTight**



## *Signals in 2000*

- Digital camera technology in the market for years
- The first social networks exist
- Exponential internet adoption
- IBM's DeepBlue computer beats world champion Chess Player Garry Kasprov (1997)





*1960s*  
Landline



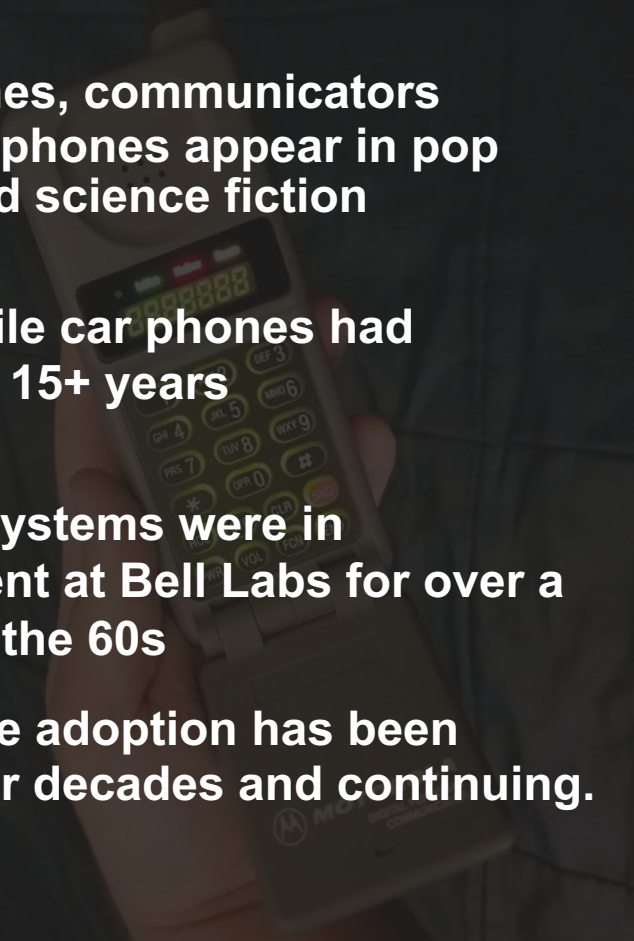
*1990s*  
Mobile





## *Signals in the 1960s*

- Car phones, communicators and video phones appear in pop culture and science fiction regularly
- Automobile car phones had existed for 15+ years
- Cellular systems were in development at Bell Labs for over a decade by the 60s
- Telephone adoption has been growing for decades and continuing.



**Can we predict the future?**

**Can we predict the future?**

**No.**



**Can we predict the future?**

**No.**

**We make the future.**

# Futures Studies

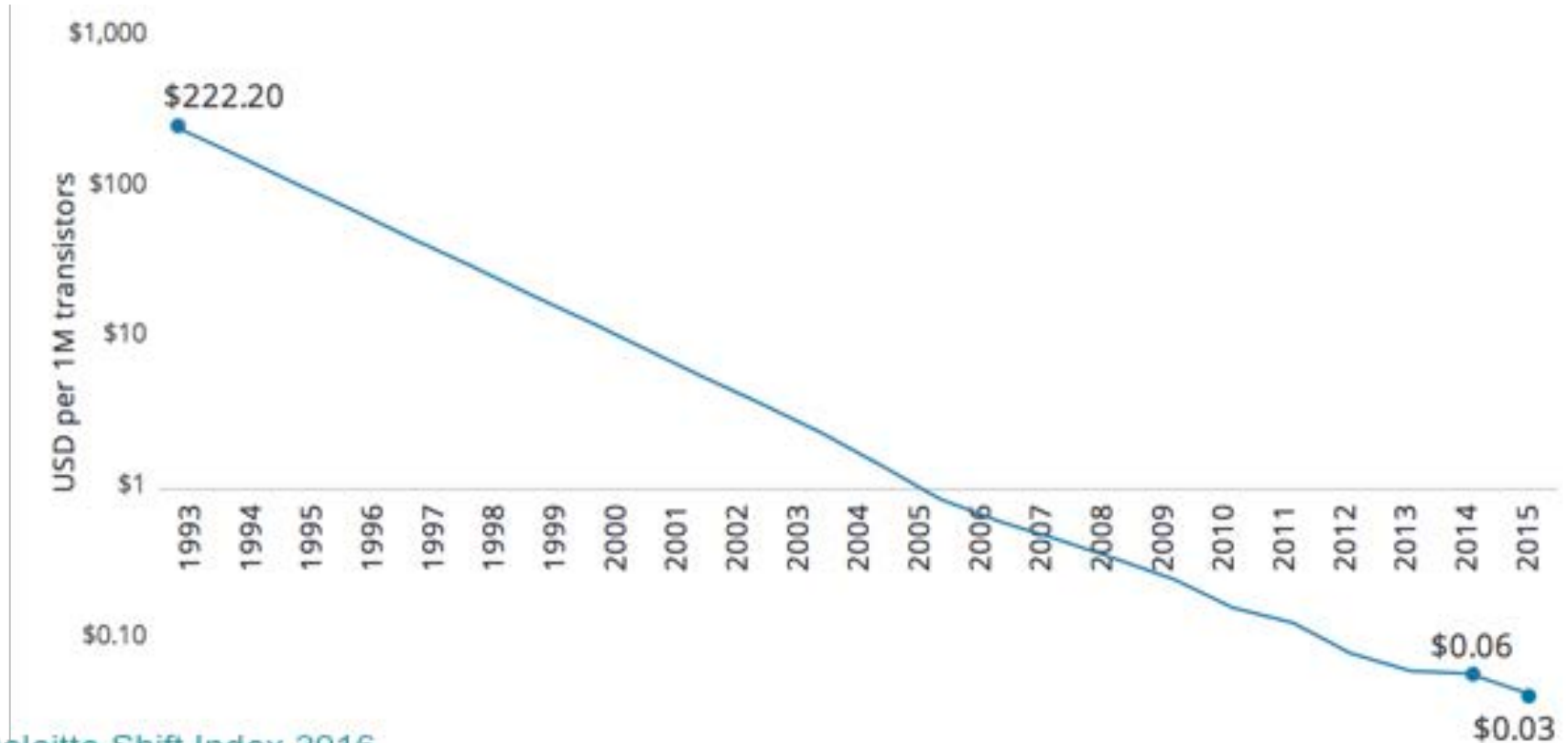
- **Forecasting different versions of the future based on what we see, so we may act to bring about a favorable scenario.**
- **Exclusive to governments and militaries, until the 1970s**
- **Big companies (Shell Oil) may use future studies in the development of their business strategies**
- **The analysis and resulting scenarios are not widely shared or embodied by the organizations**
- **It's an expensive, outsourced endeavor that happens irregularly.**

Part 2:

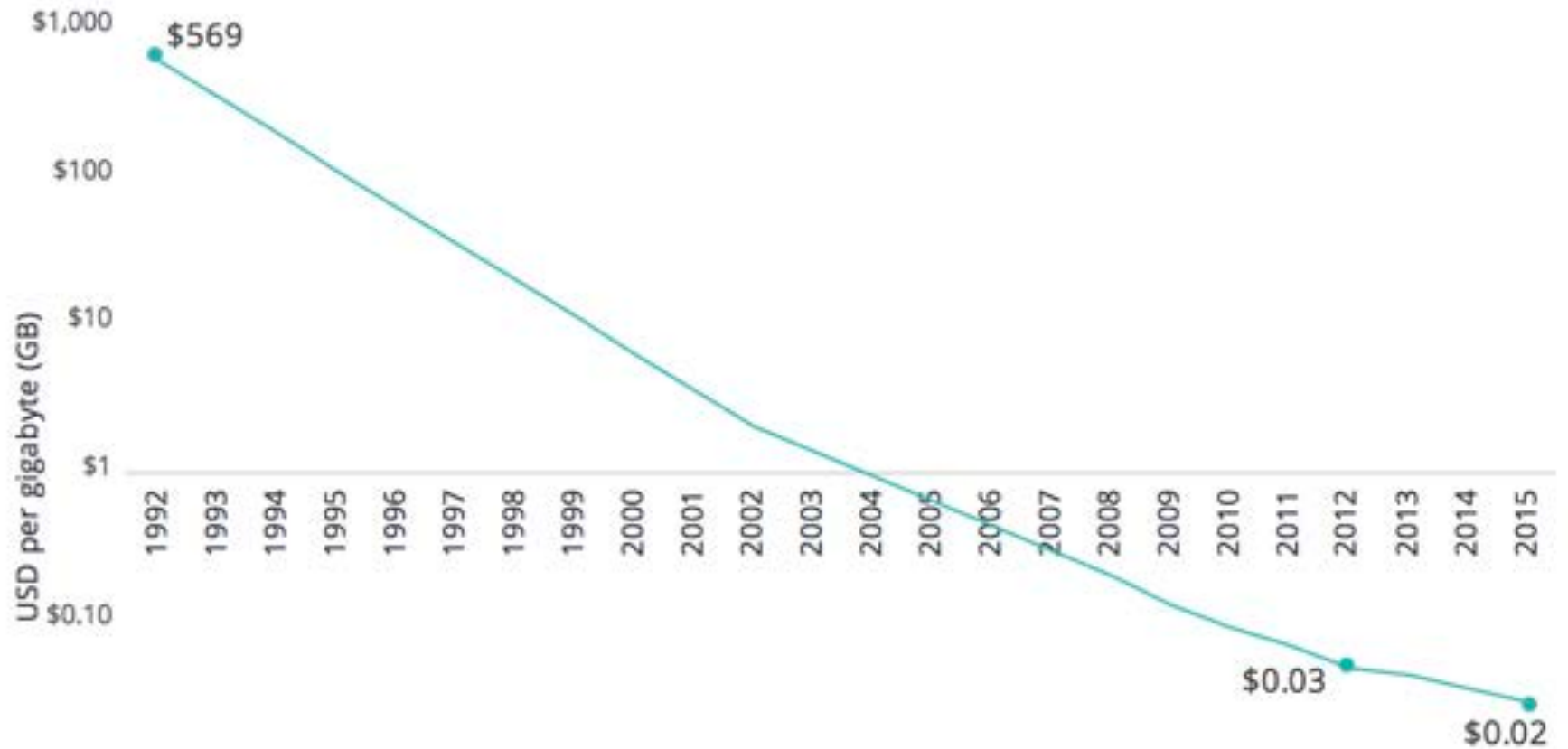
# The Future is Coming Faster



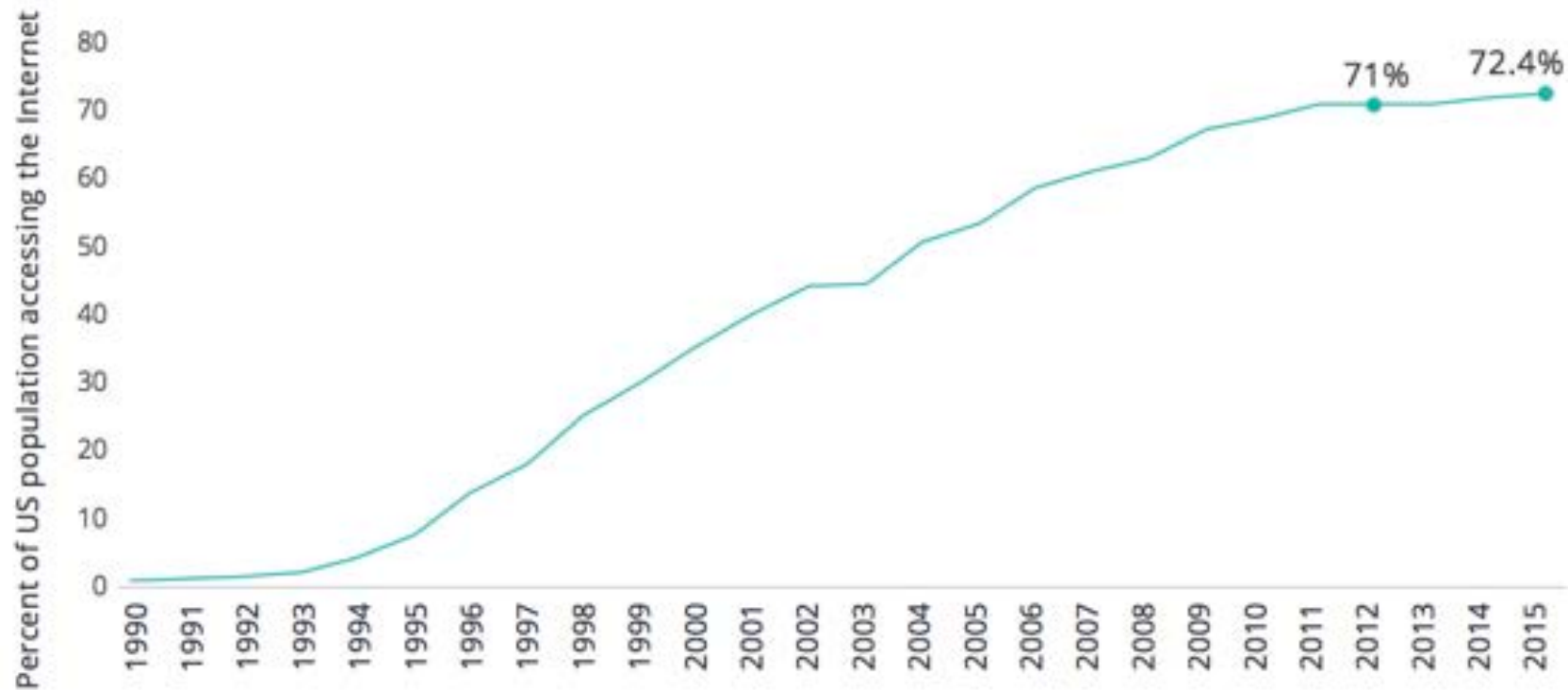
# Computing Power



# Digital Storage



# People Online



The future is arriving ever faster.

Our need for foresight is greater than it ever has been. And we're not doing much of it.

Let's have **bold opinions** of the  
future we want.

And act to make it a reality.



**Fast and nimble foresight to create  
value in a rapidly changing world.**

## Part 3:

# Find the Signals of Tomorrow

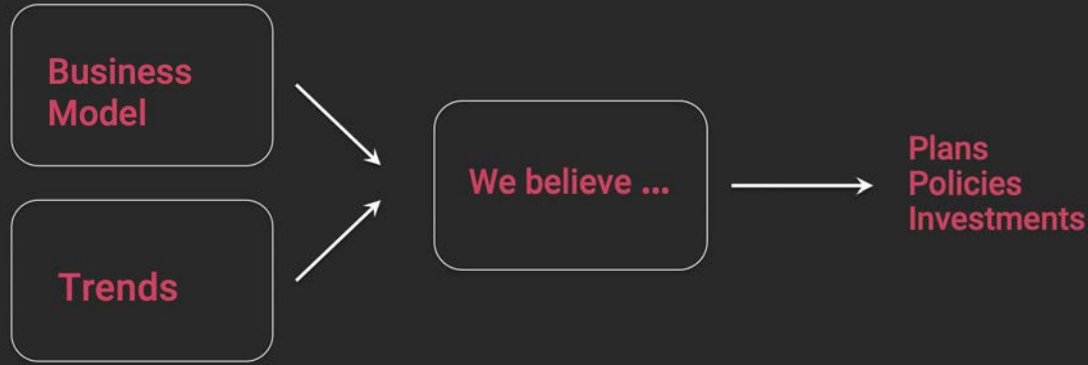
(That are present now)



# Summarizing the signals this way paves the way for action



# Do this work in a small team



A **small team** of people with context and seniority in the business or business unit.

This will make the work better quality. And it will create momentum.

The team will be natural advocates for sharing the insights and promoting actions

# The steps

- 1) Be grounded in your business model
- 2) Review trends
- 3) List challenges and opportunities (look for surprises)
- 4) Draft a statement that you can point to and share

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*Free Resources: Use multiple*



- **Political**
- **Technology**
- **Legal**
- **Population**
- **Economic**
- **Social**
- **Environmental**



**Let's assume we are a medical  
device company pursuing  
blockchain technology.**

# Technology

- Increased Blockchain adoption: Central banks from dozens of countries around the world are actively researching DTL.
- Financial sector in US and China adopting DLT
- A host of startups trying to manage information in healthcare via DLT
- GM and BMW are backing blockchain data sharing which means they will use that extended data for machine learning

## Challenges

- Governance of these systems is nascent at best – and necessary for medicine
- Huge inertia and resistance to change in the current system

## Opportunities

- Huge efficiency gains
- Better faster diagnosis when combined with machine learning.

*Free Resources: Use multiple*



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# Rapid Urbanization

**1/2** of the population live in urban areas

**1.5 Million people** are added to the global urban population **every week**

**90%** of this urban population growth will take place in **African and Asian** countries

## Challenges

- Infrastructure demands
- Inequity and mega slums
- Cities create more greenhouses gasses

## Opportunities

- Investments into infrastructure
- Carbon negative building materials
- Smart Cities / IOT

- Values-based tensions on the rise.
- As global power is diffused, there is more **room for divergent values to shape geopolitics** than there has been since the end of World War II.
- Many political leaders and communities feel they have lost control—whether to internal divisions, external rivals or multilateral organizations—**and, in response, they look to strengthen the state.**

## Challenges

- More difficult to make progress on shared global goals
- Worsening trade relations
- Risk to small and Midwest companies

## Opportunities

- People are strongly in favor of increased gender equality

# Top Global Risks 2019

## By Impact

- 1) Weapons of Mass Destruction
- 2) Failure of Climate Change Mitigation and Adaptation
- 3) Extreme Weather Events
- 4) Water Crises
- 5) Major Natural Disasters

## By Likelihood

- 1) Extreme Weather Events
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## Connecting the Dots Technology trends



# What we already know

- Increased DLT adoption: Central banks, auto industry, financial sector – Huge potential benefits
- Governance underdeveloped





Connecting the Dots  
**Population**



# Rapid Urbanization

- Populations rapidly moving to urban centers (future populations in Africa /China)
- With stressed infrastructure & growing equity gaps



Connecting the Dots  
**Geopolitical**



# Protectionism & Changing Climate

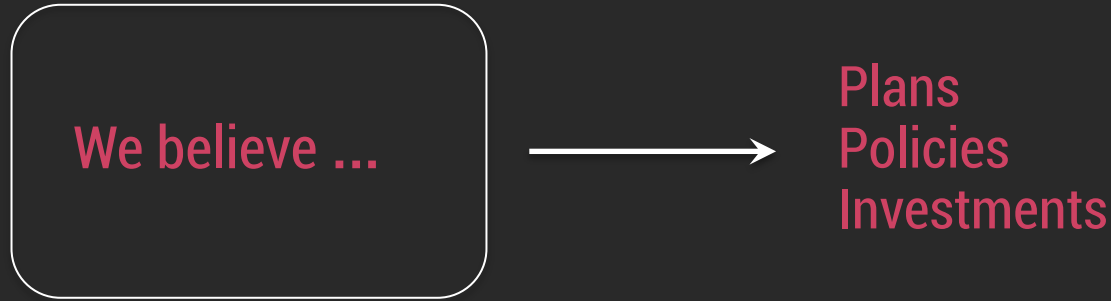
- Diffused global powers give rise to protectionism
- Lack of trust and difficult trade relations continue
- High risk / impact of extreme weather
- High risk / impact due to missing climate change mitigation and adaptation



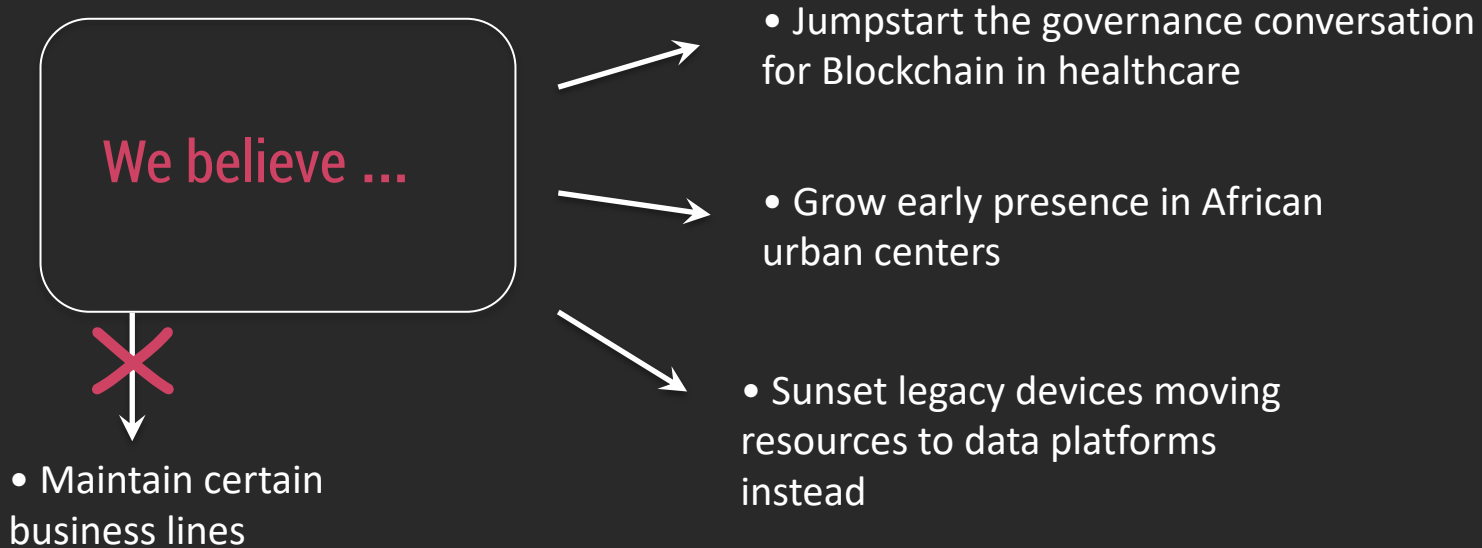
# We believe ...

- Adoption of Distributed Ledger Technology by government and industries will continue to grow.
- Healthcare demand will increase. The strain on all infrastructure as populations move to urban centers, along with more unpredictable weather will increase demand — particularly in coastal cities.
- Trade pressure impacting supply chains will continue.
- The huge upside benefits remain if we can overcome both lack of governance for the technology, and the significant inertia in the current system.

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Thank you.