

AI, Globalisation and the Future of Work

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**破壊的変動の先に
ある未来とは？**

農業から工業へ。モノからサービスへ。そして今始まった「グローボティクス転換」。国際経済学の大家が、デジタル革命のかつてない衝撃を歴史的な視点から捉える。

「新しい経済の姿を描いた、これまでで最もすぐれた本だ」

日本経済新聞出版社

ローレンス・サマーズ (ハーバード大学名誉学長、元米国財務長官)

Digital
Technology

Automation

Globalization

*Faster than
most think,*

White-collar
&
professional
Jobs

*in ways few
expect*

!

**The future is unknowable,
but also inevitable**



DEFINITIONS

Globotics

Globalization + Robotics

- Globalization = Telemigration (RI)
- Robotics = White Collar Robots (AI)

Tele-migration

People sitting in
one nation &
working in offices
in another
“Telework”



White Collar Robot (low-end) Robotic Process Automation (RPA)

The image displays a screenshot of an RPA software interface. On the left, the 'Activities' pane is open, showing a tree view of available activities. The 'Available' section is expanded to show 'User Events', which includes 'Element Trigger', 'Image Trigger', and 'System Trigger'. Under 'System Trigger', the 'Monitor Events' activity is visible. On the right, the main workspace shows a workflow diagram for a project named 'scraping pro'. The workflow starts with a 'Start' node (a green play button icon), followed by a 'Screen scraping' activity (a grey box with a magnifying glass icon and the text 'Double-click to view'). Below this is a 'Monitor events' activity (a yellow box with a magnifying glass icon and the text 'Double-click to view').

Activities

- Search
- Favorites
 - A+B Assign
 - Sequence
 - Write Line
- Recent
- Available
 - UI Automation
 - User Events
 - Element Trigger
 - Click Trigger
 - Key Press Trigger
 - Image Trigger
 - Click Image Trigger
 - System Trigger
 - Get Source Element
 - Monitor Events
 - Replay User Event
 - App Integration
 - System
 - Programming
 - Workflow

scraping pro* X

scraping_pro > Main

Main

Start

Screen scraping
Double-click to view

Monitor events
Double-click to view

White Collar Robots (high end)

Amelia, Watson,
etc.



Covid-19 changes things

1. Lots of people already fired
2. C19 forced an 'emergency' digital transformation - lasting & massive
3. Social distancing raises relative cost of in-person workers vs White Collar Robots and telemigrants
4. Firms under extreme cost pressure

IS THIS TIME
DIFFERENT?

Affecting
service &
professional
jobs

Not just factory
jobs



Today's AI is different

Computers acquire new cognitive skills
since 2016

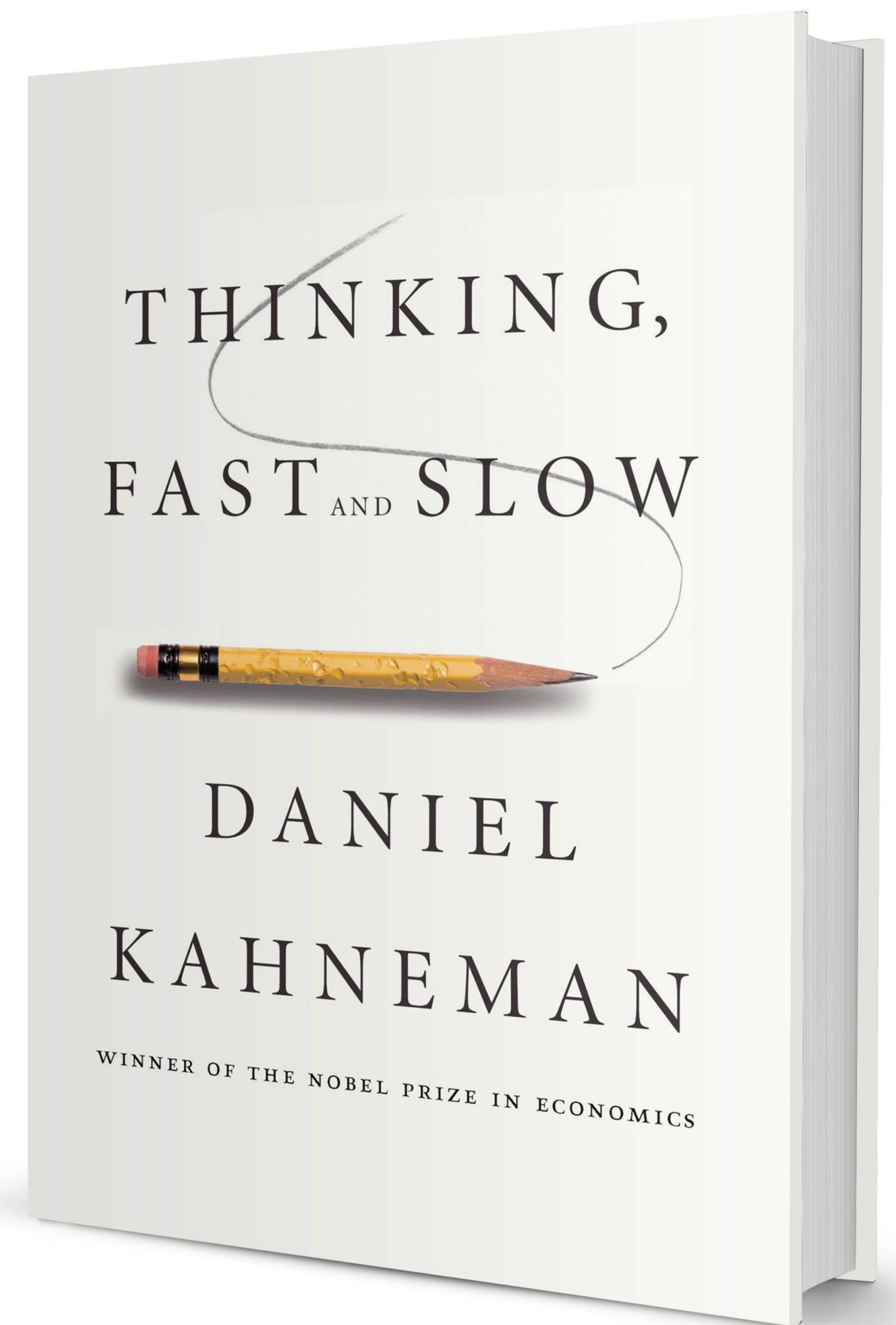
Why?

What changed?

Programming is
different

Coding =
thinking slow

Machine learning =
thinking fast



Automation & Globalisation are happening together

In past transformations, automation started long before globalization

- Microelectronics > automation (from 1973)
- ICT revolution > globalisation (from 1990s)

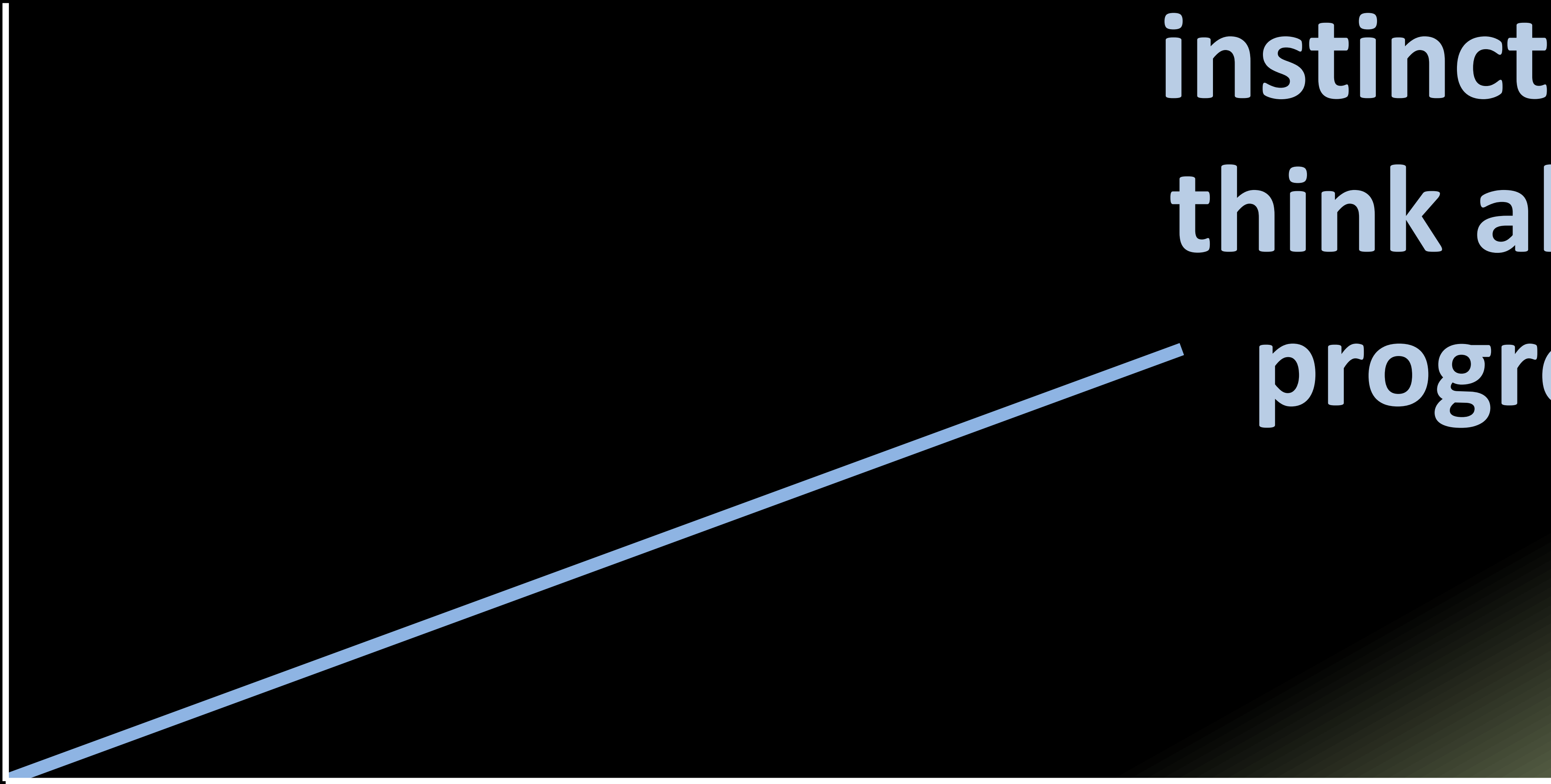
**# Coming faster than most
believe**

Predictable, but unexpected

“Digital Disruption”

Progress

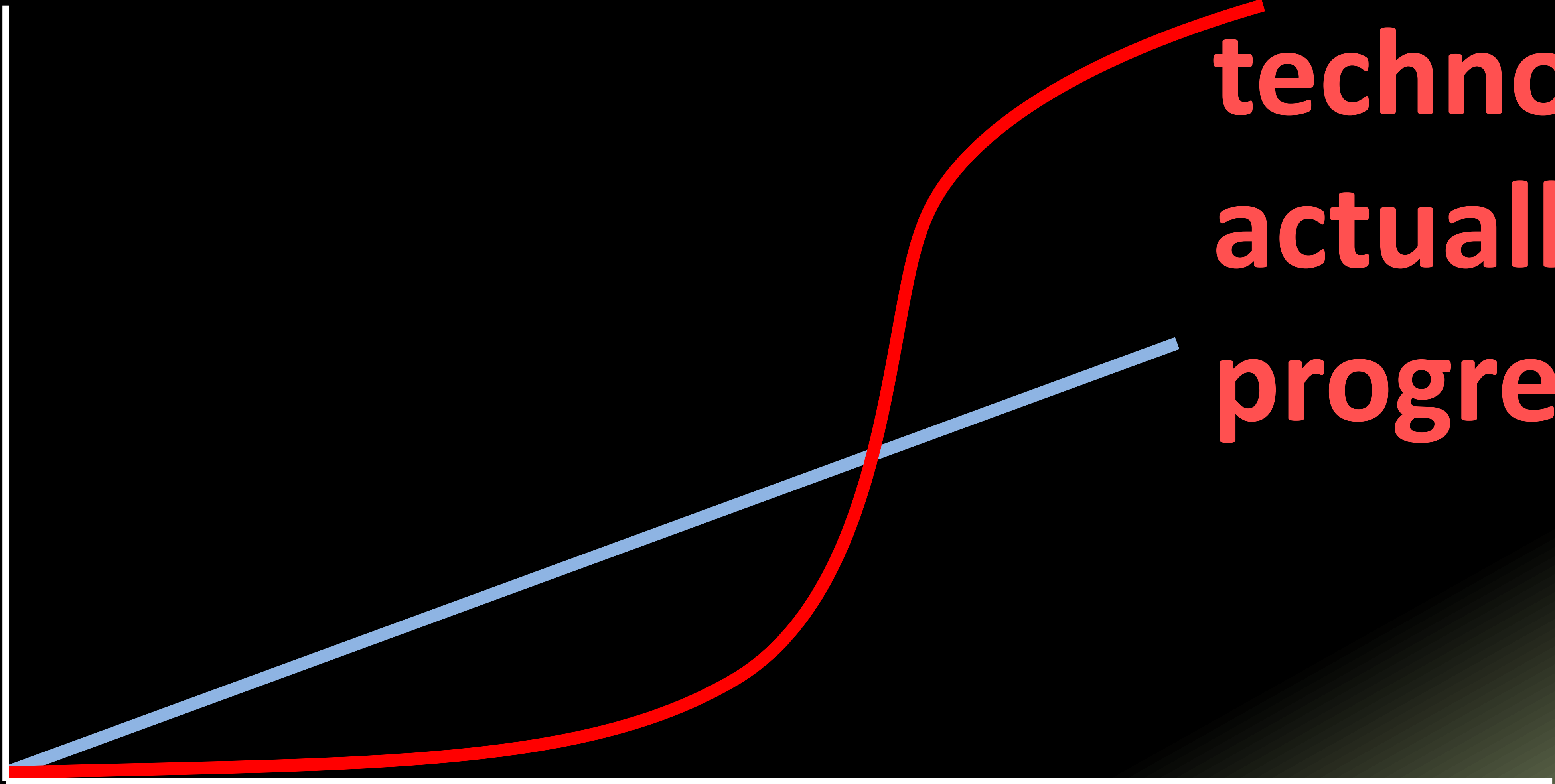
How humans
instinctively
think about
progress



Years

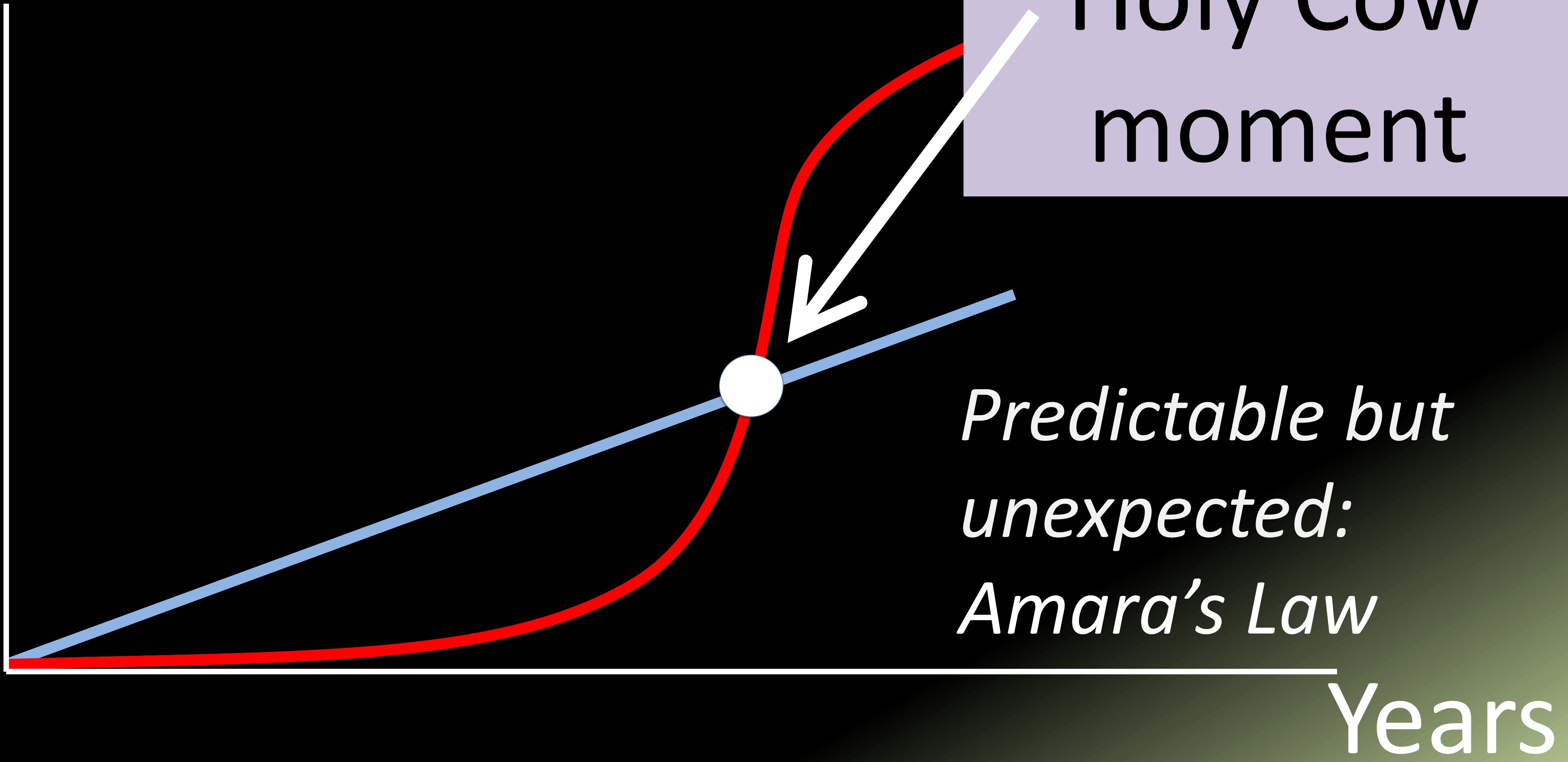
Progress

**How digital
technology
actually
progresses**



Years

Progress



COMING IN

WAYS FEW

EXPECT

**# It won't look
like a factory
closure**

“down grade unemployment,
not mass unemployment
Rust-Belt style

Think “iPhone infiltration”

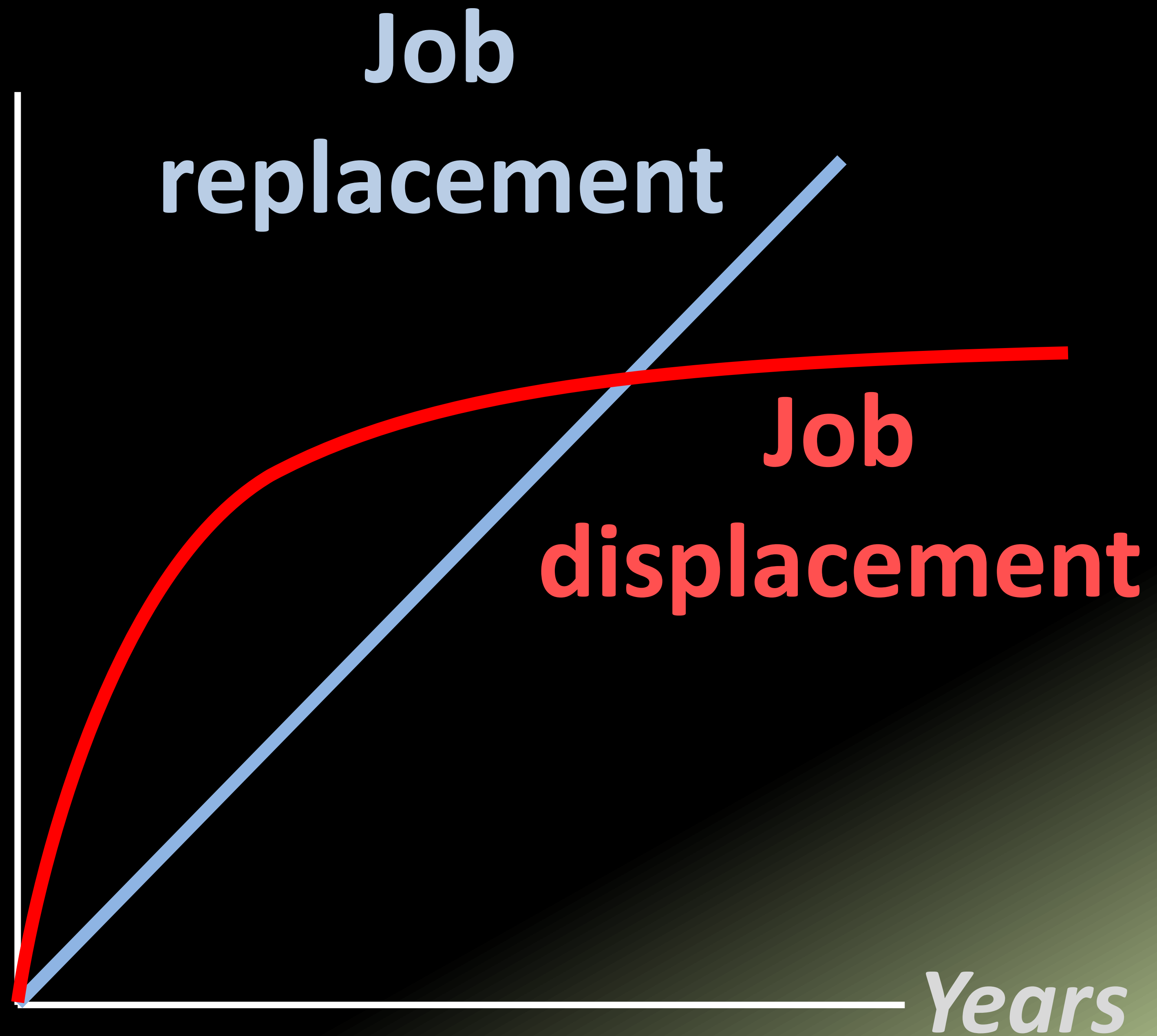


**# Job displacement is the
business model**

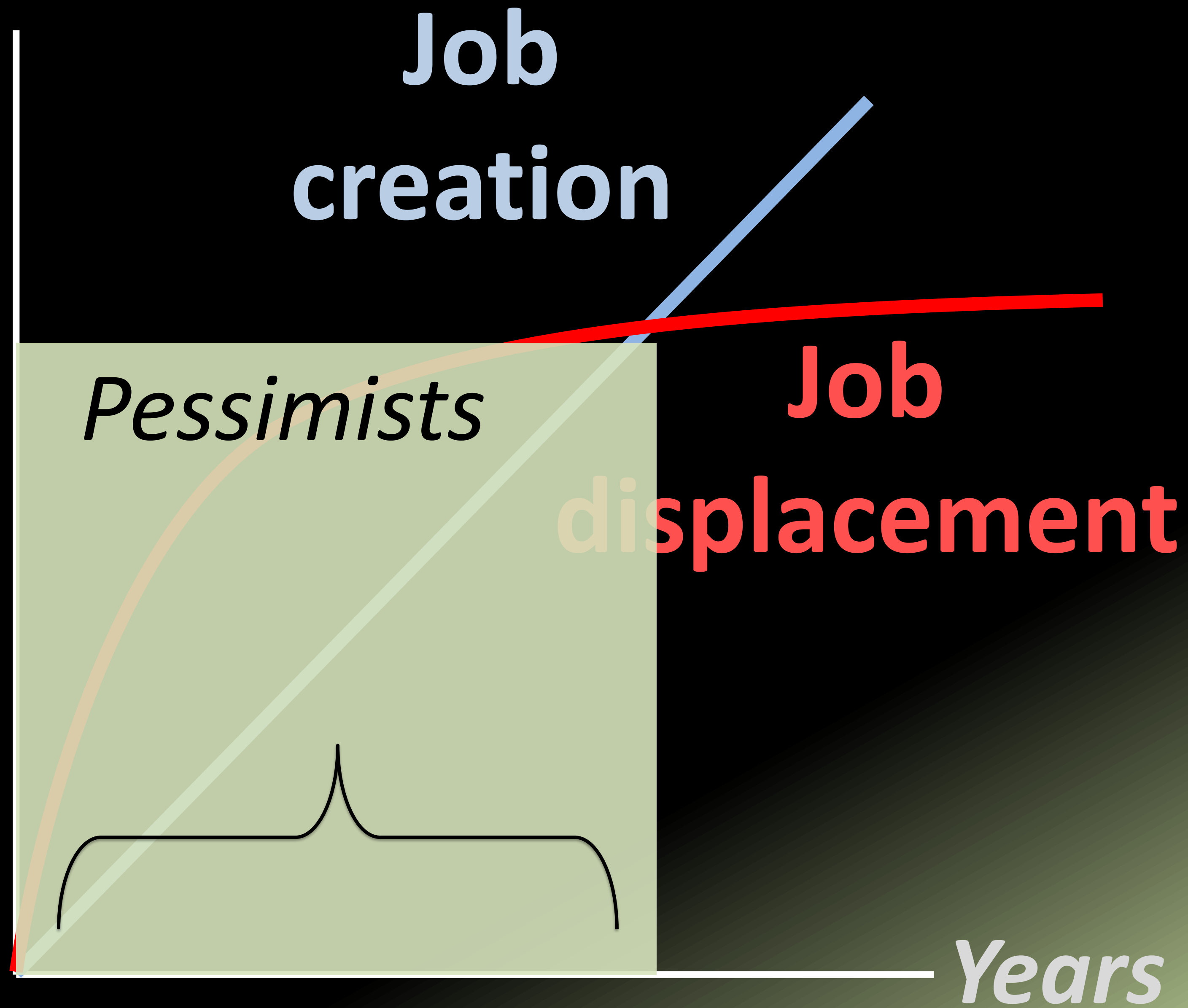
Digitech is driving job displacement

Human ingenuity is driving job creation

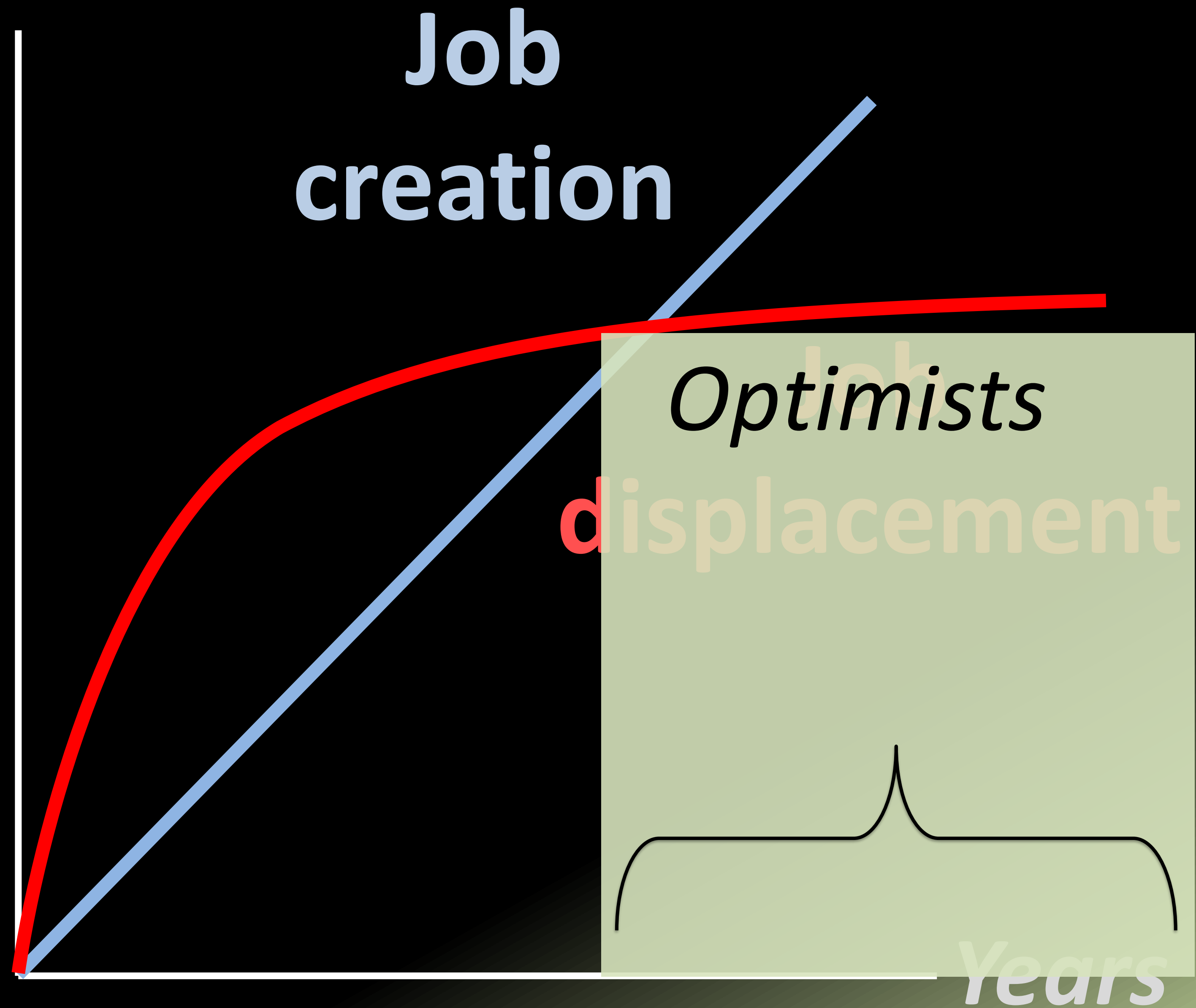
**Mismatched
speed is the
problem**



Pessimists
assume we
remain here
forever



Optimists
assume we
jump here
immediately



FUTURE

GLOBALIZATION:

TELEMIGRATION (RI)

Telemigration

Wage gaps make it profitable

Digitech makes it possible

Digitech channels

1. Domestic telecommuting
2. Online freelancing platforms
3. Advanced telecoms
4. Machine translation

Global “talent
tsunami”

1990s: industry

2020s: services



FUTURE OF

WORK:

THE LONG RUN

Future jobs

New jobs will appear

We can't know their names

But we can guess what they'll be like

Process of elimination

Globots will do what they can

We will do what globots can't

So, what can't globots do?

What can't AI do?

What can't RI do?

Telemigrants can't be in the room

Long-Run Future of Work

More human, more local jobs

Richer, more generous society

If we manage the transition

Thanks for listening

'The best book yet on the new economic era'

Larry Summers, former Chief Economist of the World Bank

THE GLOBOTICS UPHEAVAL
Globalization, Robotics, and the Future of Work

GLOBOTICS

グローボティクス

グローバル化+ロボット化がもたらす大激変

リチャード・ボールドウィン 高遠裕子 訳
Richard Baldwin

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THE
GLOBOTICS
UPHEAVAL

SLIDES FOR Q&A

Share of total employment by sector in the United States, 1850–2015, % of jobs

