



Manufacturing Executives Network Group Conference



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Namaste مرحبا Bem Vindo Selamat Datang
Willkommen
Namaste Croeso
Bienvenidos Bienvenue Croeso
Welcome Bienvenidos أهلا وسهلا
Benvenuti
Welkom
Bem Vindo
Bienvenue
Welcome
Croeso
Namaste
أهلا وسهلا مرحبا
Selamat Datang
Welcome Bienvenue
Bem Vindo
Willkommen
Benvenuti
Selamat Datang Croeso
Benvenuti
добре дошъл
Καλώς ήλθατε
Willkommen
Benvenuti

Welcome & Introductions



Barry Miller, CEO



Rob Crossett, RVP
Head of BD
Manager, Executive Groups



May 16, 2023
Slide 3

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Thank you to our Sponsors



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Insurance Group



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pecoSM

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cresa 

Submarine Industrial Base: A National Security Imperative



Manufacturing's Moonshot



Chris Scafario
President
DVIRC



May 16, 2023
Slide 8

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AMERICA

Needs
Manufacturing!



UNITED STATES MILITARY 

Total population **334,998,398**
 GDP (nominal) **USD 22.9 tr (2021)**
 Total active personnel **1,395,350**
 Total reserves **843,450**
 Defense Budget (2022)* **USD 715 bn (± 3.12% of GDP)**
**based on the FY 2022 DoD Budget Request*

STRATEGIC & SPACE COMMAND **6,400** Active personnel

 **400** ICBM
Minuteman III

 **14** SSBN
20 SLBM per SSBN

 **66** Bombers

 **142** Military Satellites

SUPPLIERS

Domestic industry   **3,750** Nuclear Warheads

US ARMY    **Including Army National Guard Reserves*

489,050 Active personnel
521,300 Reserve strength*

US MARINES  **179,250** Active personnel
35,850 Reserve strength

 **31** Principal Amphibious Ships
2 LHA, 7 LHD, 11 LPD, 11 LSD

 **143** Landing Craft

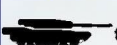
 **8,078** Armoured Vehicles


 **388** Fighter Aircraft


 **64** Aircraft


 **143** Attack Helicopters


 **594** Helicopters other


 **2,645** MBT

 **2,931** IFV


 **10,549** APC


 **19,516** Armoured Vehicles


 **1,339** Guns


 **689** Howitzer

 **588** MRL

 **2,507** Mortars

 **740** Attack Helicopters

 **3,072** Helicopters

 **416** UAVs

NAVY  **349,600** Active personnel
100,450 Reserve strength
 & US Coast Guard: 41,650 Active personnel

 **347** Total Navy Ships*
* and 408 Coast Guard Ships

 **11** Aircraft Carriers



 **70** Submarines


 **130** Major War Ships


 **925** Fighter Aircraft


 **338** Aircraft


 **611** Helicopters


AIR US Air Force &  **329,400** Active personnel
 Air Nat. Guard  **178,600** Reserve strength


 **418** Air Superiority


 **1,810** Fighter/Attack & Ground Attack


 **141** Bombers

 **382** Tanker

 **125** AEW&C and ISR

 **625** Transport

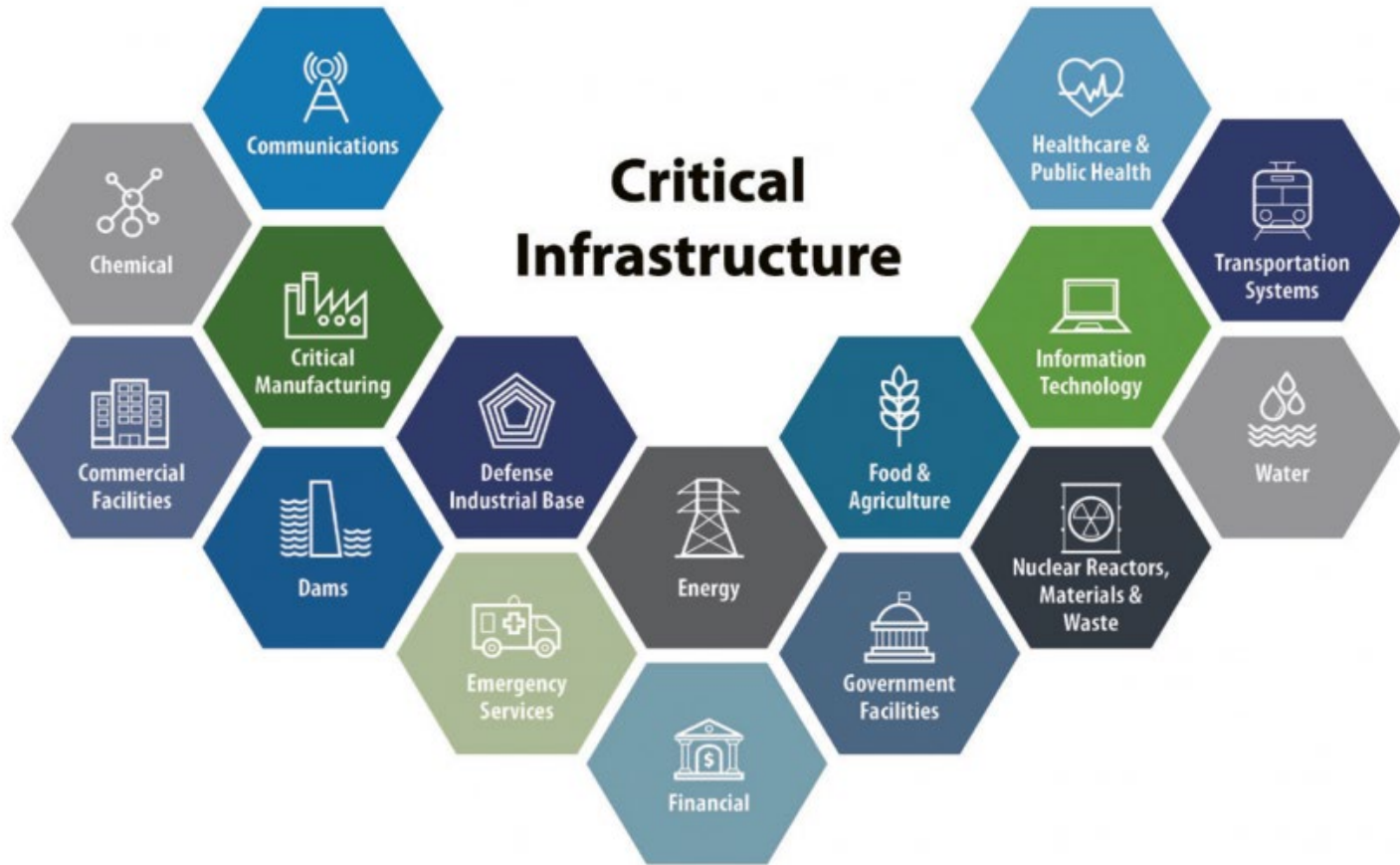
 **282** UAVs

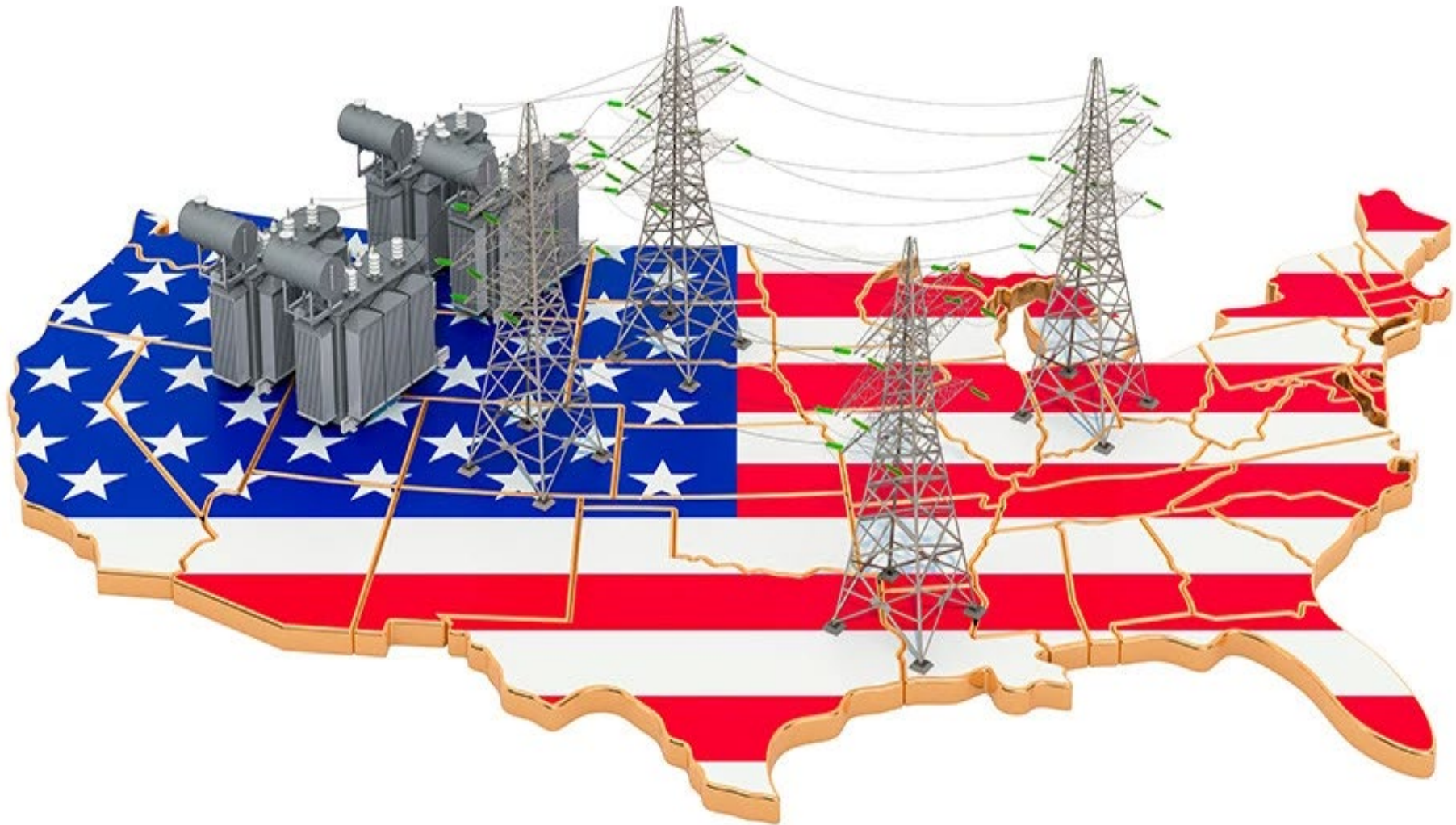
 **178** Helicopters





Critical Infrastructure

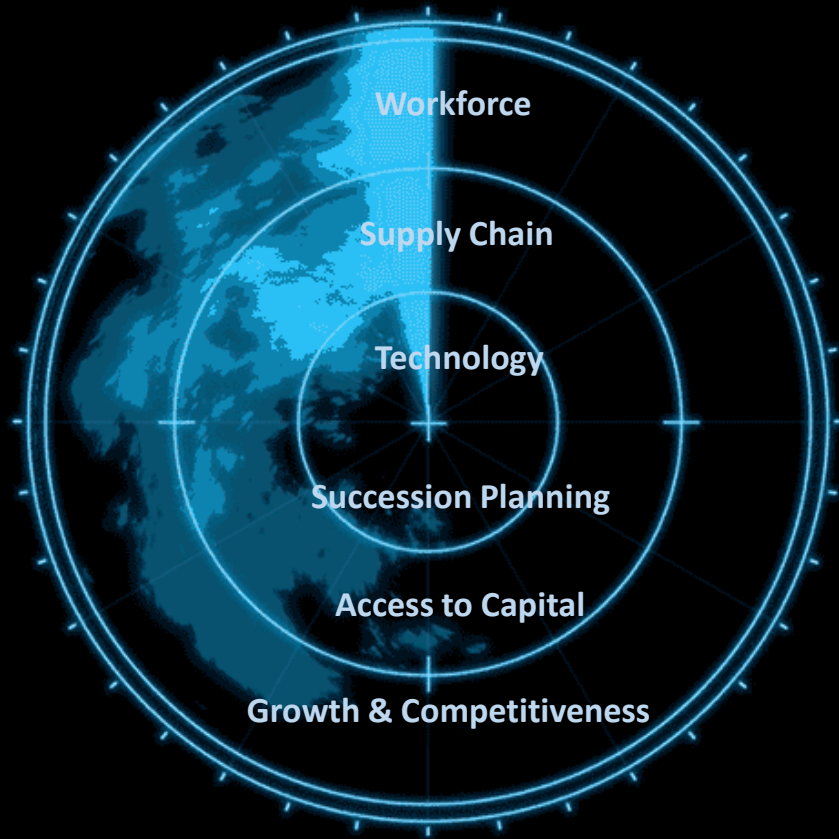




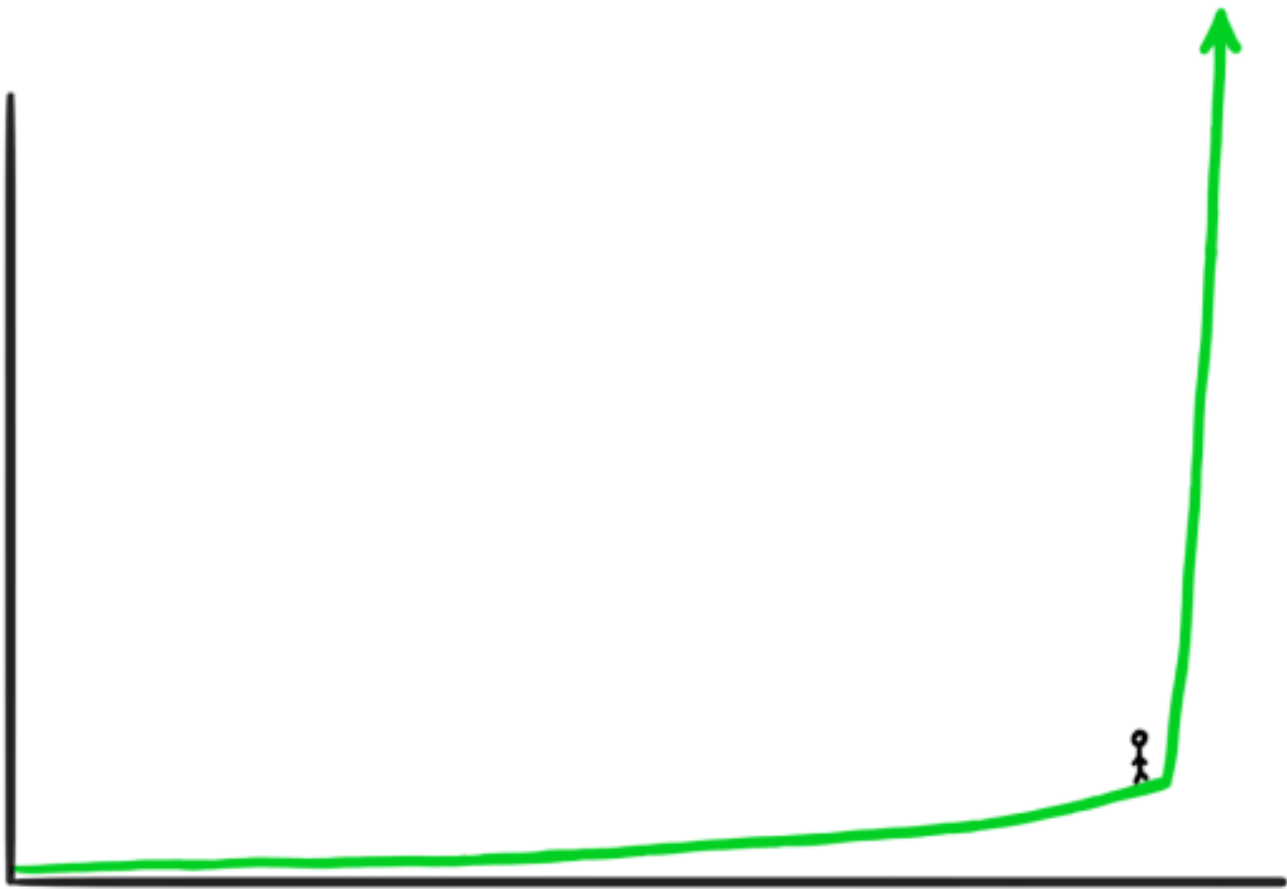


Needs

Manufacturing!

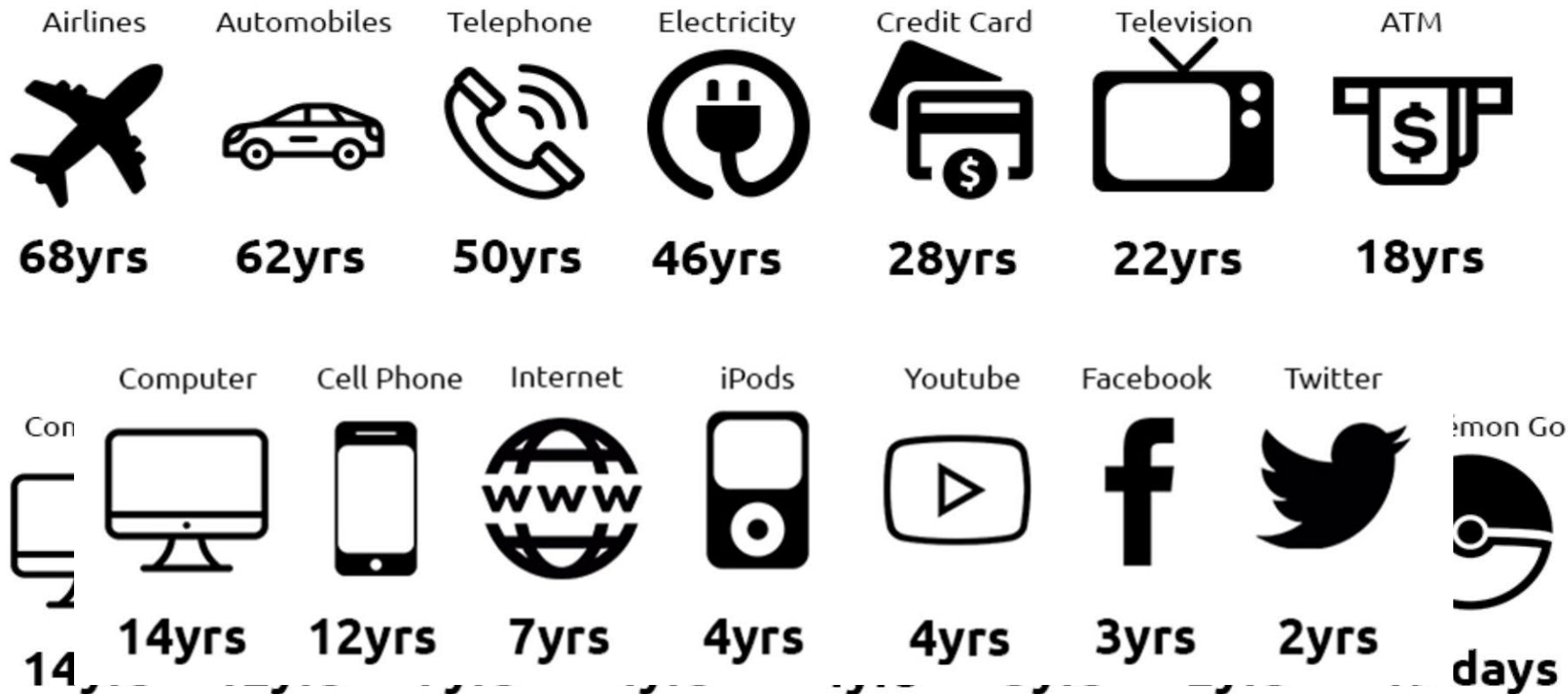


Human Progress



Time

NUMBER OF YEARS IT TOOK FOR EACH PRODUCT TO GAIN 50 MILLION USERS:





TikTok



+ New chat

Power BI DAX Same Month Sales

Journal Entry for Car Sale

Journal Entry For Sales

Alteryx SharePoint connector is

Creating Date Table in PowerBI

DAX Prior Year Amount

Autosize Excel columns Python

Clear conversations

Dark mode

OpenAI Discord

Updates & FAQ

Log out

ChatGPT



Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



Limitations

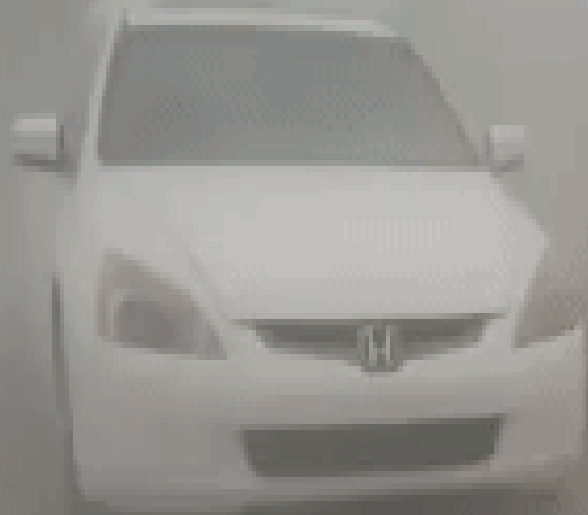
May occasionally generate incorrect information

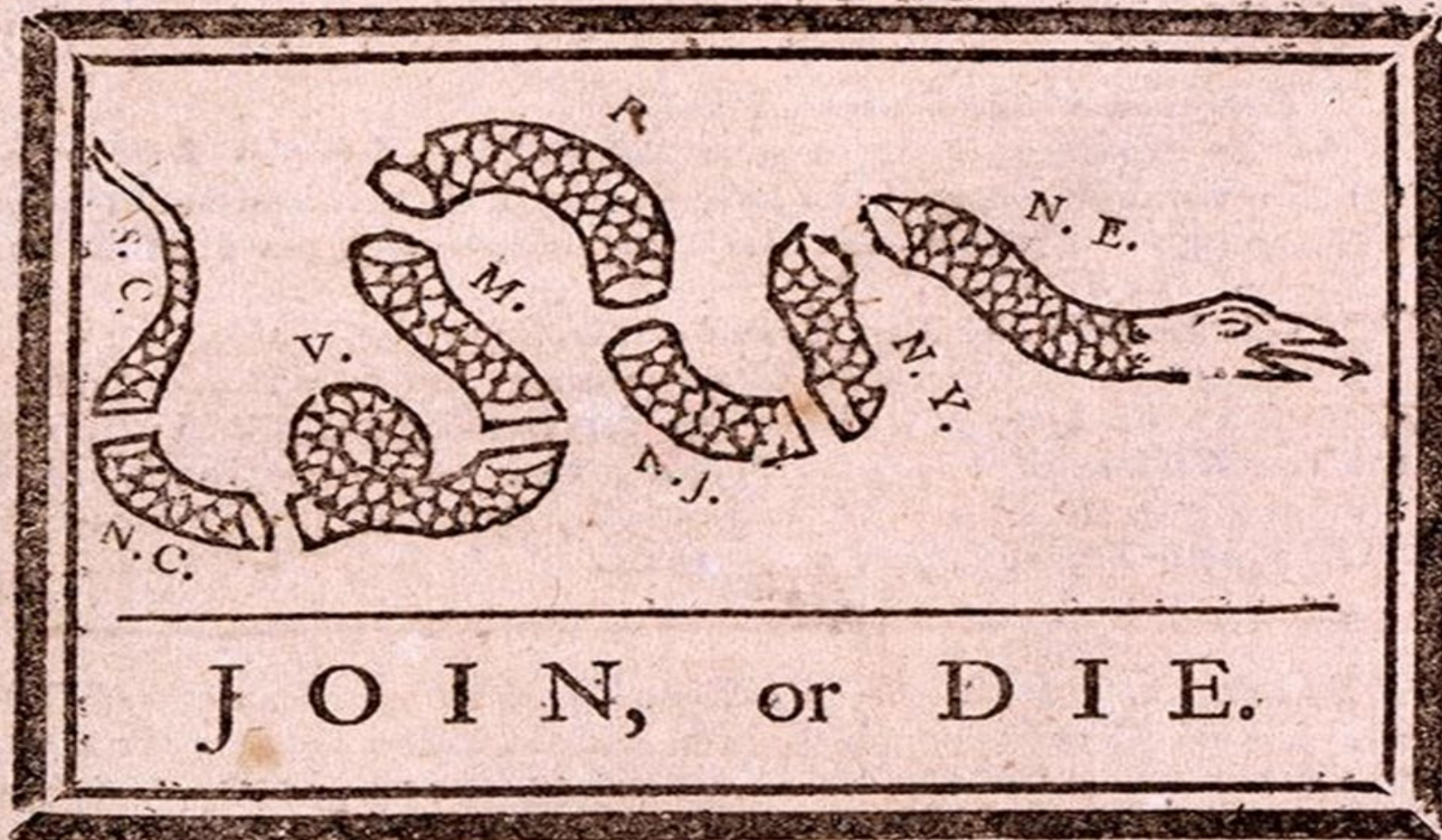
May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

How do I write a formula in dax that compares year to date sales with prior year to date sales?







We hear that the General Assembly of this Province have voted the Sum of Ten Thousand Pounds to be given to the King's Use at

William

Flour
 16s. Mi
 Pipe Sta
 Madeira
 Ditto 2s
 57s. 6d
 sylvania

Cus

Snow

Brig Reb

Brig Joh

Ship Cha

Snow Me

Brig Mo

Schooner

Brig Frie

Sloop Spe

Ship Frie

Ship Aria

OUTW

Adapt, or Die.



**Manufacturing
Needs a Moonshot!**



It's the year 2030 and DVIRC is...

Connecting the brightest minds, most advanced technologies, and boldest innovations.

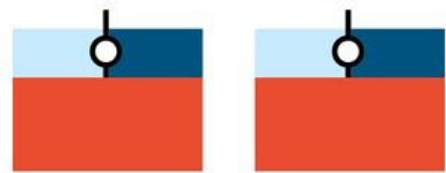
Transforming Southeastern Pennsylvania into a globally recognized hub for advanced manufacturing excellence.

Designing and building next generation life sustaining, life enriching, and life defending goods, services, and technologies.

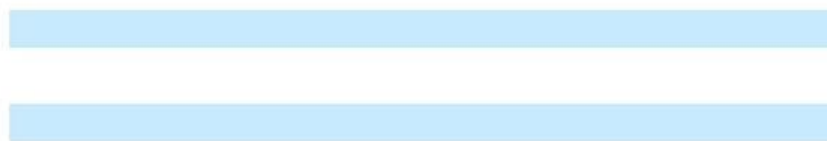
Creating family sustaining careers, a thriving regional economy, and the benchmark for an American Manufacturing Renaissance.



THE FUTURE



OF



AMERICAN

MANUFACTURING



**“ Failure is Not
An Option. ”**

Gene Kranz and Mercury, Gemini,
and Apollo Mission Control

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Workforce Trends



Brian Clapp
President
CCI



The Top 2023 Workforce Trends

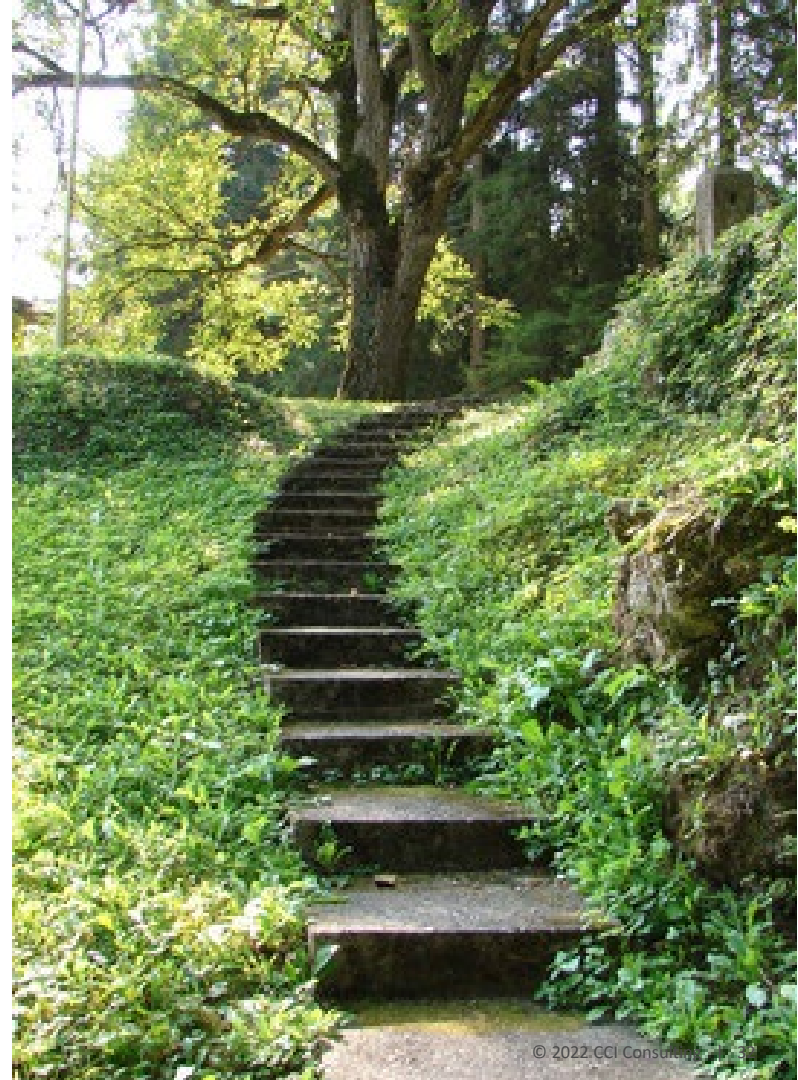
Mitigate the risks through effective Workforce Strategy & Management



Today's Conversation

The challenges of effective workforce management have never been greater, nor has the need.

We will explore the major trends, highlight the impact and implication of each, and discuss how organizations can better adapt and respond by taking a more proactive approach to workforce planning and management.

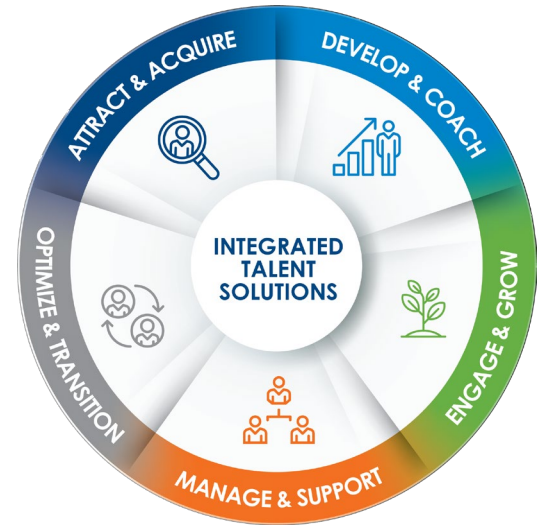


About CCI Consulting

CCI Consulting is an HR Consulting firm that helps clients align their people strategies to their current and future business needs.

We partner with clients to:

- **Attract and retain** the right people to achieve business goals
- Enable leaders and teams to **elevate engagement, performance, and resiliency**
- Enhance the capacity and capability of **HR operations and strategies**
- Address constantly evolving talent needs through **career development, management, and transition**



TREND #1 - Workforce Demographics

- The population of working-age adults is shrinking and getting older
- Baby Boomers are retiring at the rate of 10,000 per day
- Talent shortages for key skills and roles are here for the long term

How are you accounting for changing demographics in your Workforce Planning?

- As Boomers retire, are you attending to knowledge transfer & succession planning
- If more challenging to find external talent, what are you doing to retain and develop your current employees?
- Is your hiring process agile?

TREND #2 – Workplace Flexibility is Here to Stay

- There are three times more remote jobs than in 2019 (from an estimated 8% to 24%)
- 74% of U.S. companies are using, or plan to implement, a more flexible work model
- Employers trying to fill in-person jobs struggle to attract workers who may gravitate toward work that lets them work from home

How are you responding to the trend toward more workplace flexibility?

- What can you do to address employee desire for greater flexibility and work-life balance?
- How do you integrate the need for higher productivity with creating an engaging work environment?
- Employee experience is as important as competitive compensation and benefits

TREND #3 - Diversity, Equity, and Inclusion is a Business Imperative

- Nearly half of Gen Z (those currently entering the workforce) are racial or ethnic minorities
- While women make up approximately 58% of the workforce, they earn, on average, 84% of what their male counterparts earn
- Only 28% of employees strongly agree that their organization is fair to everyone - Gallup

How are you responding to the call for greater diversity, equity, and inclusion?

- How are you accounting for changing demographics in your workforce planning?
- Does your employment proposition resonate with today's (and tomorrow's) employees?
- While increased diversity of age, race, ethnicity, and background is positive, how do you address the greater potential for conflict?

TREND #4 – Presenteeism and Quiet Quitting are on the Rise

- US labor productivity has slowed while, at the same time, US workers are considered amongst the most overworked of any developed country
- According to Gallup, only 32% of employees are engaged, and 15% are actively disengaged
- “Fast quitting” (leaving a position before the one-year mark) is on the rise

What are you doing to create a compelling and engaging work environment?

- How are you equipping your managers to be better at motivating and engaging employees?
- Are you aware of the multitude of factors that affect employee performance and engagement?
- Healthy and resilient employees are critical for a healthy and resilient organization. How are you addressing well-being?

TREND #5 - The impact of Industry 4.0

- Industry 4.0 will change the world of work as significantly as the first industrial revolution did 200 years ago
- It will reshape how people work and the skills required for virtually every role

Are you prepared?

- Are you investing in workforce training and development to keep up with technological advancements and industry changes? This can be expensive and time-consuming, but critical for keeping up with the pace of change.
- Transformational automation will eliminate some jobs while creating new ones that require different skills. What are you doing to anticipate and plan to bridge the skill gaps?

**The Obvious
(and not so Obvious)
“Dos and Don’ts” about
Moving Forward**



Avoid the 3 Most Common Derailers



- 1. Don't ignore Darwin** - “It is not the strongest of the species that survives, nor the most intelligent; it is the one most adaptable to change.”
- 2. Don't ignore the reality gap** – Things rarely go as planned. Sustained success is about recognizing and responding to the gap between the plan and the reality of the situation. Flex and adjust.
- 3. Don't forget it's always about people** - All organizations have goals, and most have strategies. Both, however, are irrelevant if the right people aren't in place to execute them. A leader's role is to enable people to get the right things done in the right way.

Top 5 Things to Do



- 1. Invest in frontline leaders** - sustained organizational success requires effective leadership. Enhancing the skills of leaders helps them better navigate challenges and opportunities.
- 2. Create succession plans** - minimize the risk of disruption and ensure a smooth transition by identifying and developing talent in advance of planned and unexpected departures.
- 3. Craft a relevant and compelling Employee Value Proposition** - focus on attracting and retaining employees who value what you have to offer.
- 4. Attend to your people** - As the world of work continues to change, employees are becoming a more significant competitive advantage than ever before. Invest in skill development for the future.
- 5. Embrace change** – rapidly evolving technology, seismic demographic shifts, and unsettled economic landscape demand a fresh approach. In this environment, what got you here won't necessarily get you where you need to go next.

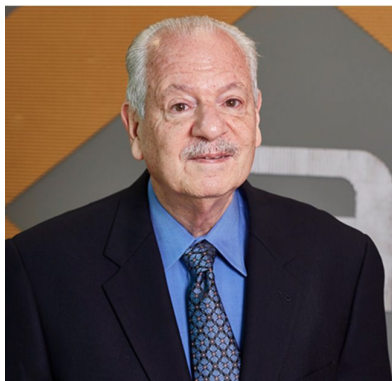


The path ahead is bright
and full of potential, but
it's not without challenges
and obstacles.

Embrace the journey!

Brian Clapp
610-608-0276
bclapp@cciconsulting.com

The Cristo Rey Story: Opportunity for Engagement



Bob Cohen
Owner
Acme Corrugated Box



Rip Collins
President / CEO
Tec Services

Cristo Rey Philadelphia High School





*Rigorous College Prep
Curriculum*

+

*Innovative Work Study
Model*

=

Access & Opportunity



2022-2023 STUDENT DEMOGRAPHICS

541

Total Enrollment

\$10,102

Average Family Income Per Capita



- Christian (Non-Catholic) 47%
- Catholic 34%
- Does Not Identify 7%
- Muslim 6%
- Buddhist 1%
- Other 5%

2021-2022 STUDENT PERFORMANCE

93%

Average Daily Attendance

270

Students who achieved 3.0 GPA or greater

25

Students who participated in Summer Enrichment & College Immersion Programs

232

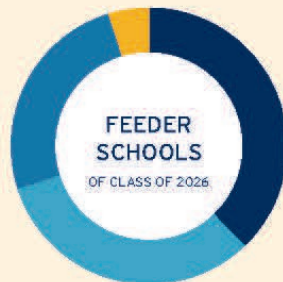
Students who participated in at least one athletic or extracurricular activity

91%

Student Retention Rate from 21-22 to 22-23 School Year



- Black/African American 64%
- Hispanic/Latino 30%
- Two or more races 3%
- Asian/Asian American 2%
- Non-Hispanic White 1%



- Charter 38%
- Catholic 32%
- Public 25%
- Private Non-Catholic 5%

100 %

College Acceptance

60%

College Persistence

Compared to 15% amongst Socioeconomic Peers





CRISTO REY
PHILADELPHIA
HIGH SCHOOL

CRISTO REY
PHILADELPHIA
HIGH SCHOOL

CRISTO REY
PHILADELPHIA
HIGH SCHOOL

CRISTO REY
PHILADELPHIA
HIGH SCHOOL

Jesus
Jardon

CONDENSED
Campbell's
Tomato
SOUP

CONDENSED
Campbell's
Evan
Noris

CONDENSED
Campbell's
Roshelly
Diaz

CONDENSED
Campbell's
Nicholas
Pinckney

The School That Works

Work-Study Partners 2022-2023



Conference Break



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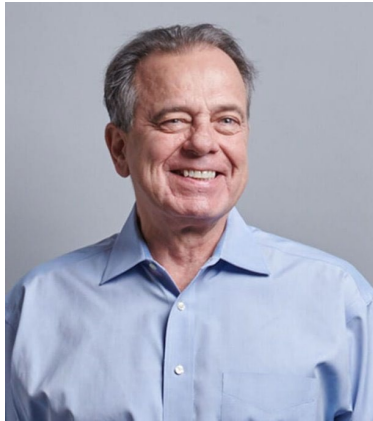
Sponsor Spotlight



Insperity[®]

HR that Makes a Difference[™]

Workforce Development Opportunities



Tony Girifalco
EVP
DVIRC



Hannah McGarry
Director,
Workforce Engagement
DVIRC



Workforce Engagement Update Manufacturing Executives Conference

Tony Girifalco & Hannah McGarry

May 10, 2023



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Overview

- Changing Landscape
- DVIRC's Programs
- Labor Study & Fundraising Update
- Defense Supply Chain
- Opportunities for Engagement



The Changing Landscape

What Young Workers Want

- Flexibility
- Meaningful Work
- Well-being
- Opportunities for Advancement
- Higher pay than pre-COVID

Re-thinking Education

- The proportion of students considering four-year college has decreased by 23 percentage points since May 2020
- 43% said the cost of college is the most important element in their education decision

Employer Challenges

- Other Sectors
- Retention
- Ghosting
- Culture Wars



DVIRC Programs

\$75,000

What's So Cool

New Director

Hannah McGarry

\$130,000

Dream Team

New Partners

-DOD
-JEVS Orleans
Technical College

\$189,000

Sewing Machine Operators

New Efforts

Matt Cordes
Mike Conallen





“Students who are approached early and often about either educational or work opportunities tend to migrate to those opportunities.”

Who is going to Do the Work, Ron Hetrick, Senior Labor Economist, *Lightcast*

What's So Cool?

- An annual video contest to excite middle school students in the region about **Manufacturing Careers**
- Program's objective is to change perceptions about manufacturing
- Contest is state-wide
- This year's winner is Upper Moreland Middle School and Packaging Progressions



What's So Cool?

What's So Cool at Packaging Progressions?

Upper Moreland Middle School

<https://www.whatssocool.org/contests/philly/>



Dream Team



- Pilot Year
- 19 Ambassadors from 12 companies
- 2-year commitment
- 12 presentations scheduled | Goal is 15
- 6 schools

Dream Team Ambassadors



Anias Allen
Colorcon



Tm Brown
Southco



Bridget Casey
Bracalente



Hannah Dixon
Johnson Matthey

Dream Team Ambassadors



Allyson Louie
Leonardo



RJ Lualhati
Globus Medical



Lisa Miller
Greene, Tweed & Co



Christopher Navickas
Johnson Matthey

Dream Team Ambassadors



Kevin Ravasio
Ameriscend



Molly Rind
Greene, Tweed & Co.



Andrew Robinson
Polysciences



Nadine Trombley
PDC Machines

Dream Team Ambassadors



Jaclyn Ulvila
Greene, Tweed & Co.



Cullen Walsh
Greene, Tweed & Co.



Durell Williams
Lavazza



Tyler Smith
Greene, Tweed & Co.

Dream Team Ambassadors



Joshua Loebig
Double H Plastics



Jeremy Fehon
Polysciences



Morgan Jacob
Polysciences

Genesis & Progression—Labor Study Fundraising

Labor Market Study and White Paper Recommendations



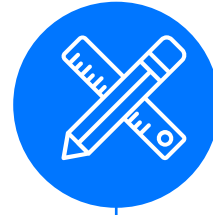
Labor Market Study

Data/Analysis shows demand far outstripping supply



White Paper

Recommendations for short-, mid- and long-term



Fundraising

State, Federal, Local Foundations / Earmarks



Current State & Results

Programs & Funding
Ongoing Efforts

Manufacturing / Workforce Ecosystem

Current State

- Complex & Disjointed
- Manufacturing Programs
- Good & Not-so-good Efforts
- Sector Competition
- New Population Engagement

Key Actors

- Community Colleges
- CTE High Schools
- Comprehensive High Schools
- Workforce System
- Department of Defense
- Manufacturers!



Fundraising to Date

	SOURCE	DESCRIPTION	INVESTMENT
	DCED	Dream Team & Sewers Collaborative	\$319,000
	Private Sector	Board members, Network Groups, SMMs	\$30,000
	America Works	Sewers Collaborative—Immigrants & Refugees	\$10,000
	PA Community & Economic Assistance Fund	ARPA Dollars from Senator Hughes	\$250,000
	HH Colehower Foundation	What’s So Cool About Manufacturing?	\$5,000
	NJ MEMP Life Sciences	Assessments, including Workforce	\$150,000
		Total	\$764,000



Opportunities for Engagement

- **What's So Cool About Manufacturing?**
- **The Dream Team**
- **Student Internships**
- **Make a tax-deductible donation!**



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What's Next?

- **Increased visibility through DVIRC channels**
- **Revise and Update White Paper**
- **Continue work on Foundations & Sponsorships**
- **Seek federal funding**
- **New Workforce Engagement Charter**
- **Current State of Regional Capacity & Enrollment**
- **Develop New Partnerships to Support Goals**



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Thank you

DVIRC

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Philadelphia, PA 19154

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Sponsor Spotlight





G. Scott Clemons, CFA
Partner & Chief Investment Strategist
Brown Brothers Harriman & Co. Private Banking

BROWN 
BROTHERS
HARRIMAN



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A Stormy Spring

An Economic Weather Report for 2023

G. Scott Clemons, CFA

Partner & Chief Investment Strategist
Brown Brothers Harriman & Co. Private Banking
scott.clemons@bbh.com

10 May 2023

 @GSClemons

 Scott Clemons



The Future of Labor

Google Parent Alphabet to Cut 12,000 Jobs Amid Wave of Tech Layoffs **McDonald's Cuts Pay Packages, Closes 14 Offices Alongside Layoffs Across Chain**

FedEx Is Laying Off More Than 100,000 Jobs, Including Its Management Ranks

Fast-food chain offered some employees a chance to remain with reduced compensation

Salesforce to Lay Off 10,000 Employees, Reduce Offices

Co-CEO Marc Benioff says cuts

What CEOs Are Saying: 2023 'Is the Year of Efficiency'

Increasingly alarmed by **2,200 People**

Accenture to Spend \$1.5 Billion on Cost Reductions

The professional services firm is streamlining

Disney Plans to Spend \$1.5 Billion on Cost Reductions

Newly reinstated company

Leaders from Meta, Apple, Ford and other companies talk about business and consumer spending, AI and hiring plans

Higher prices and remain **this**

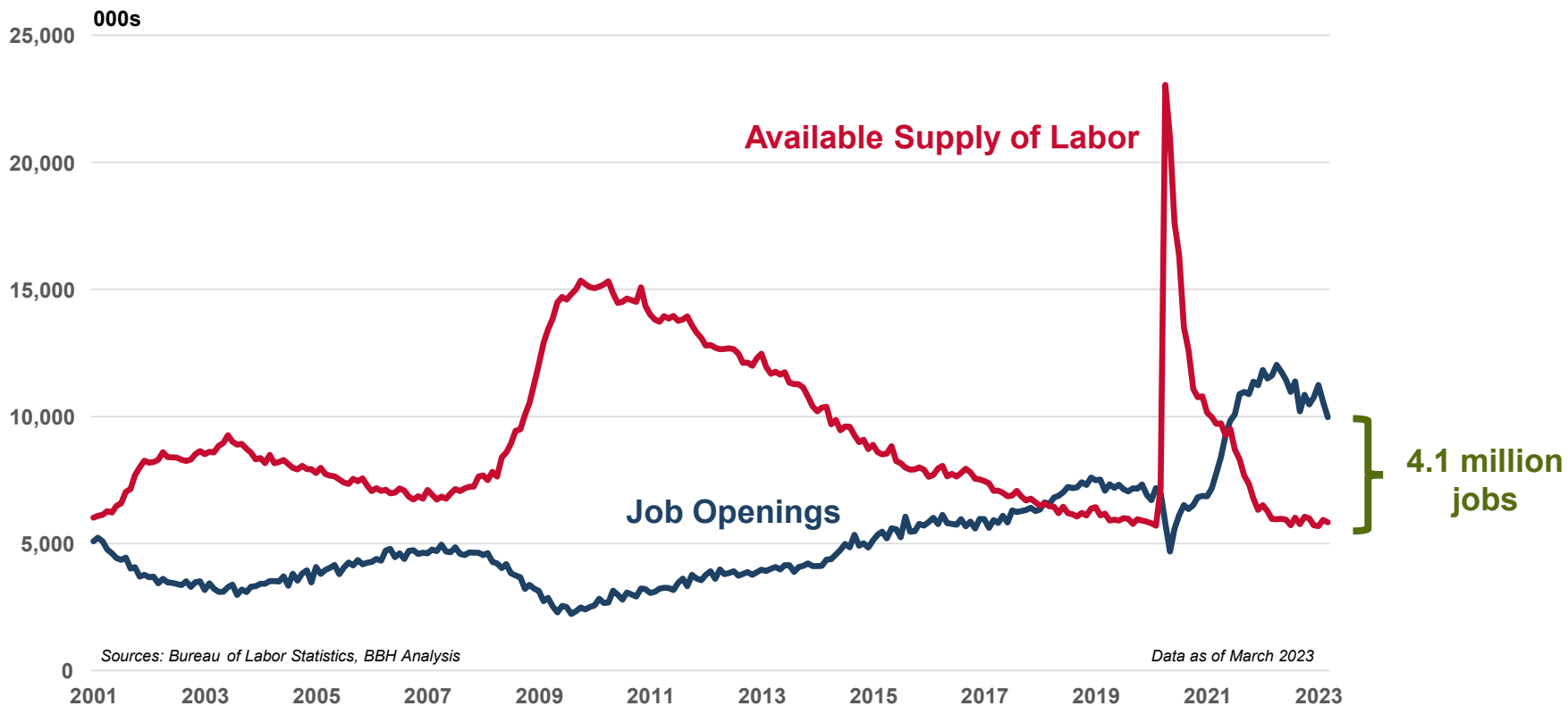
Meta Plans 10,000 Job Cuts

Morgan Stanley Plans 3,000 More Job Cuts as Dealmaking Slumps

Restructuring to fit industrial automation

- Headcount reductions are bank's second round within six months

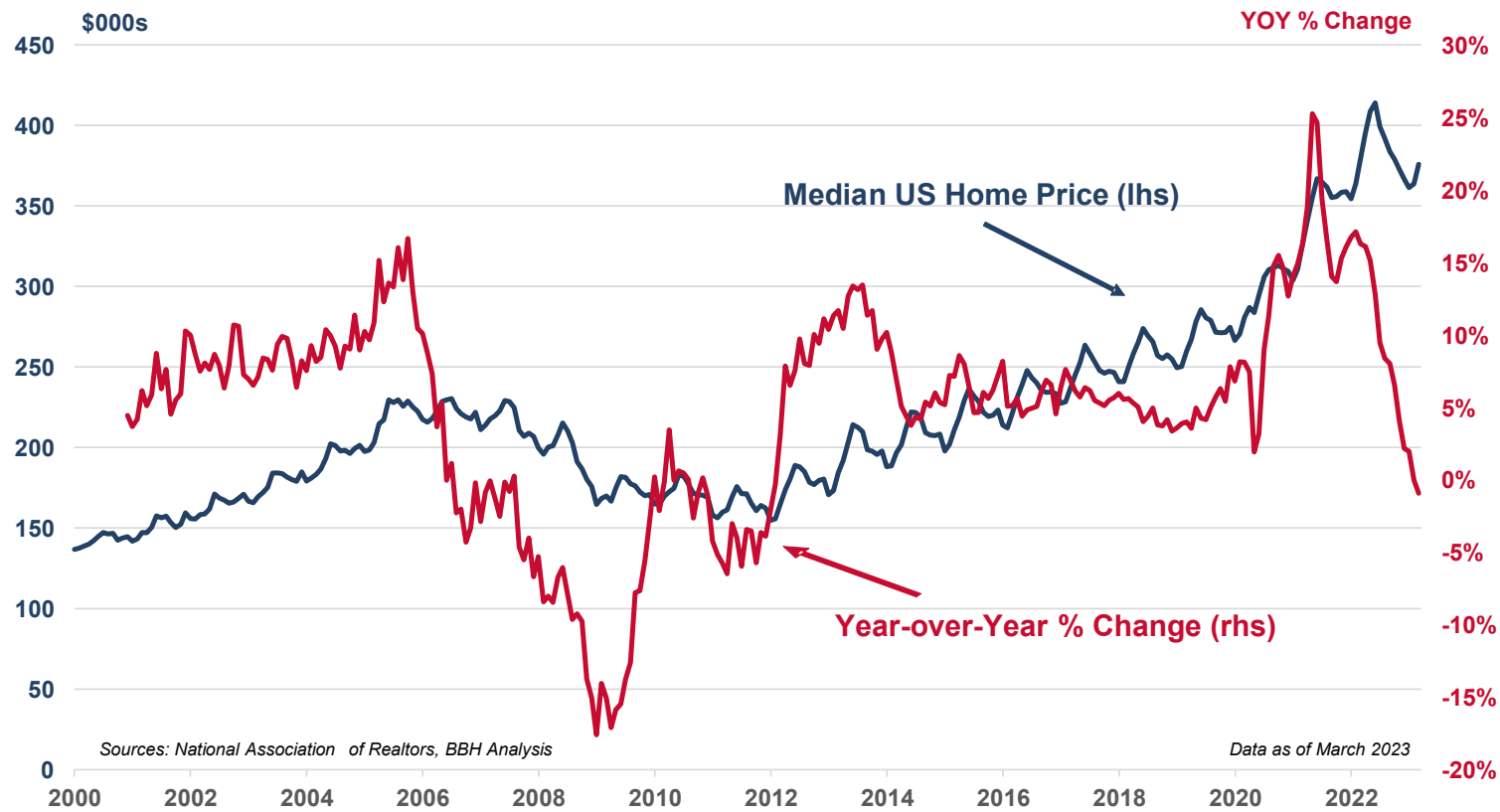
Labor Supply and Demand



Sources: Bureau of Labor Statistics, BBH Analysis

Data as of March 2023

U.S. Housing Prices

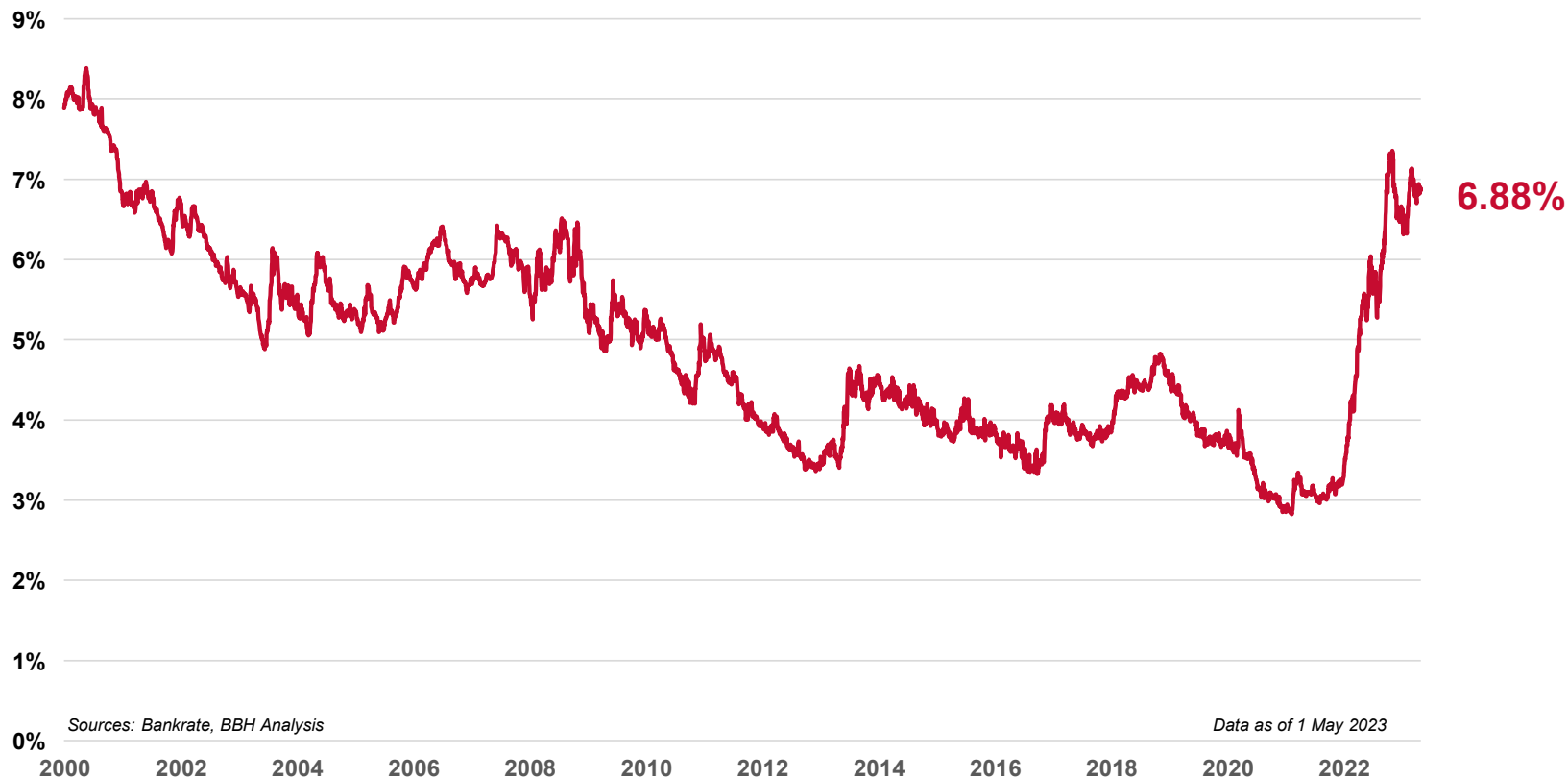


Sources: National Association of Realtors, BBH Analysis

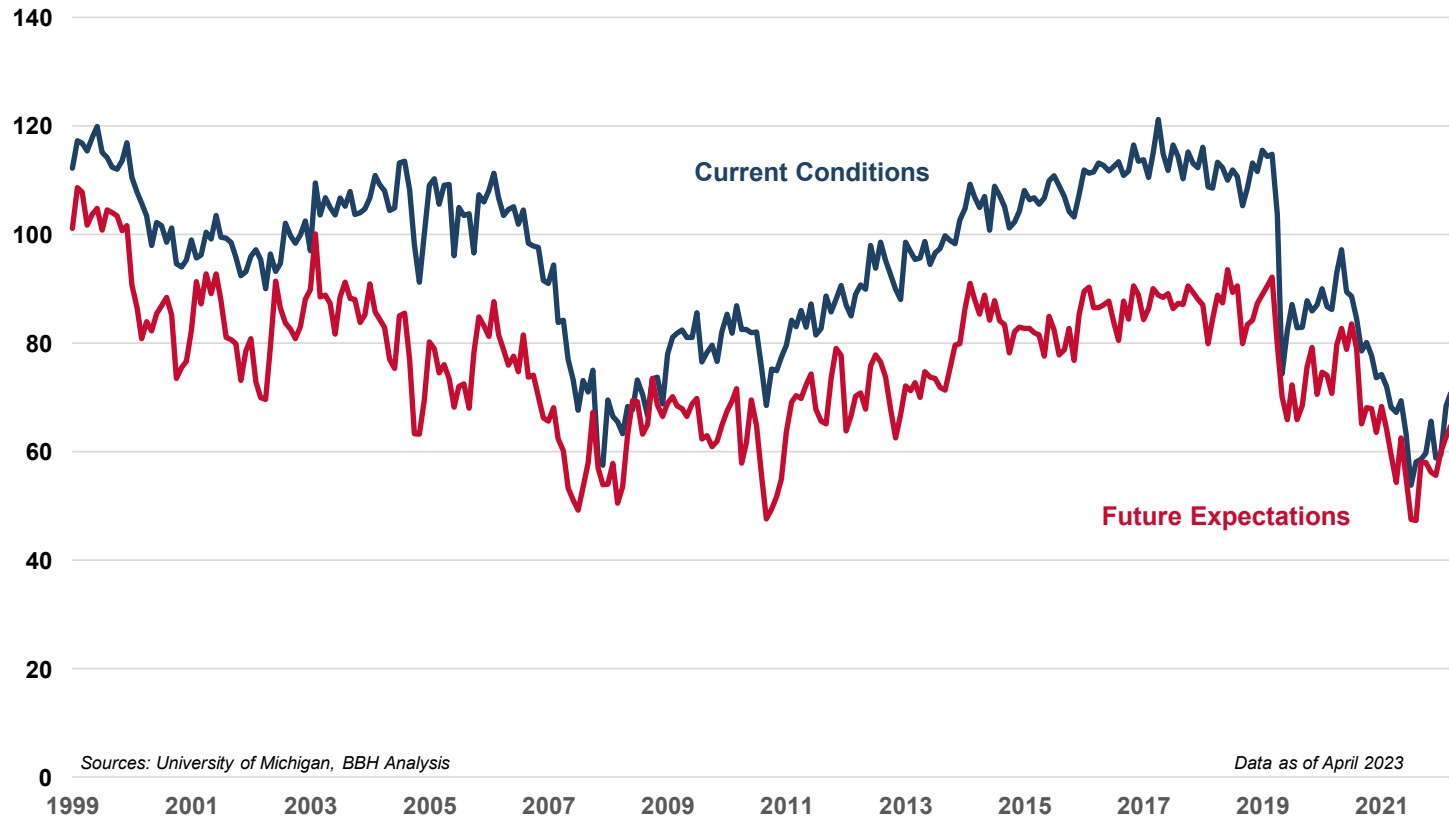
Data as of March 2023

Mortgage Rates

National Average 30-Year Conventional Mortgage Rate

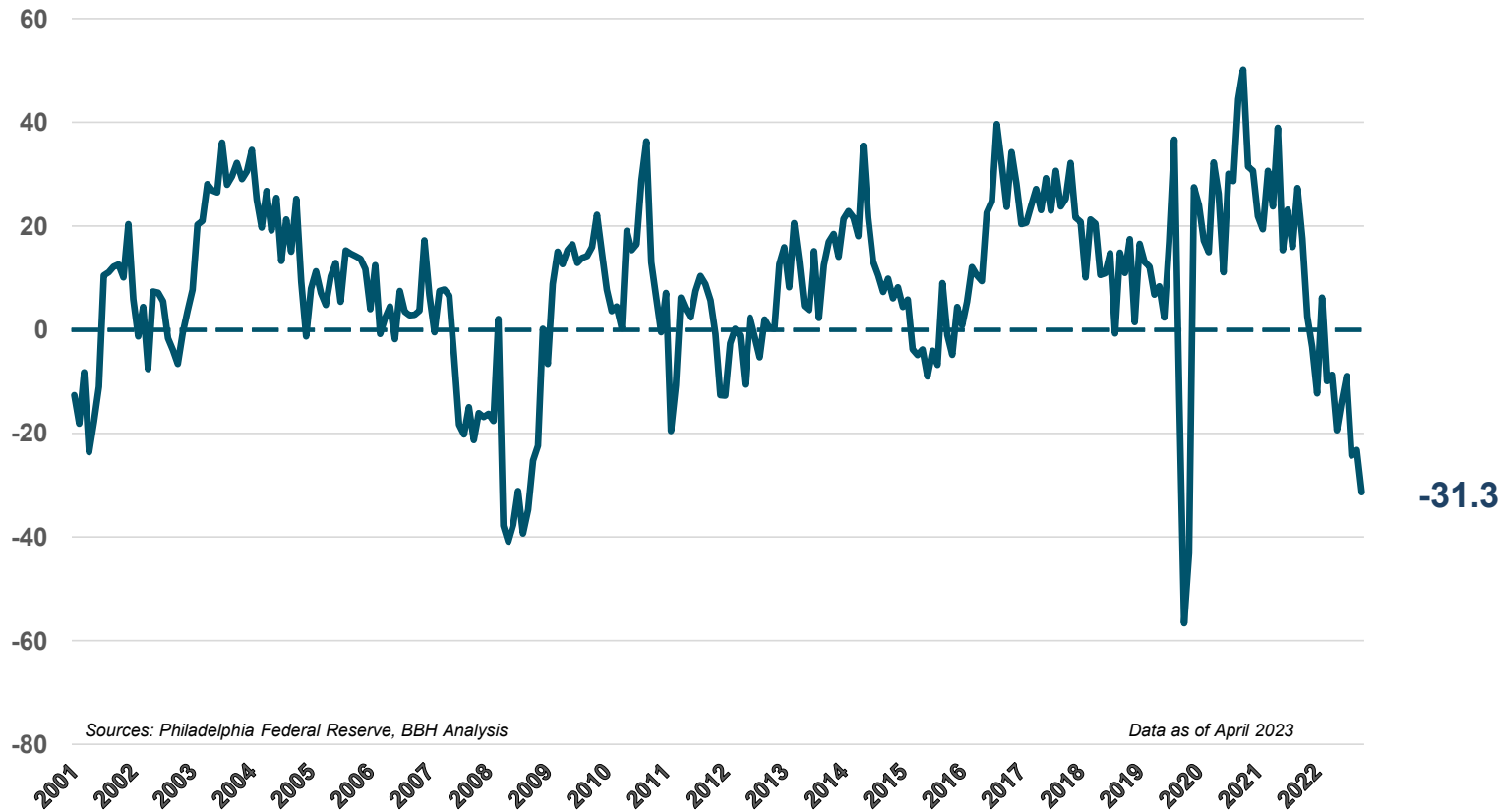


Consumer Confidence



Manufacturing Sentiment

Philadelphia Fed Sentiment Survey



Sources: Philadelphia Federal Reserve, BBH Analysis

Data as of April 2023

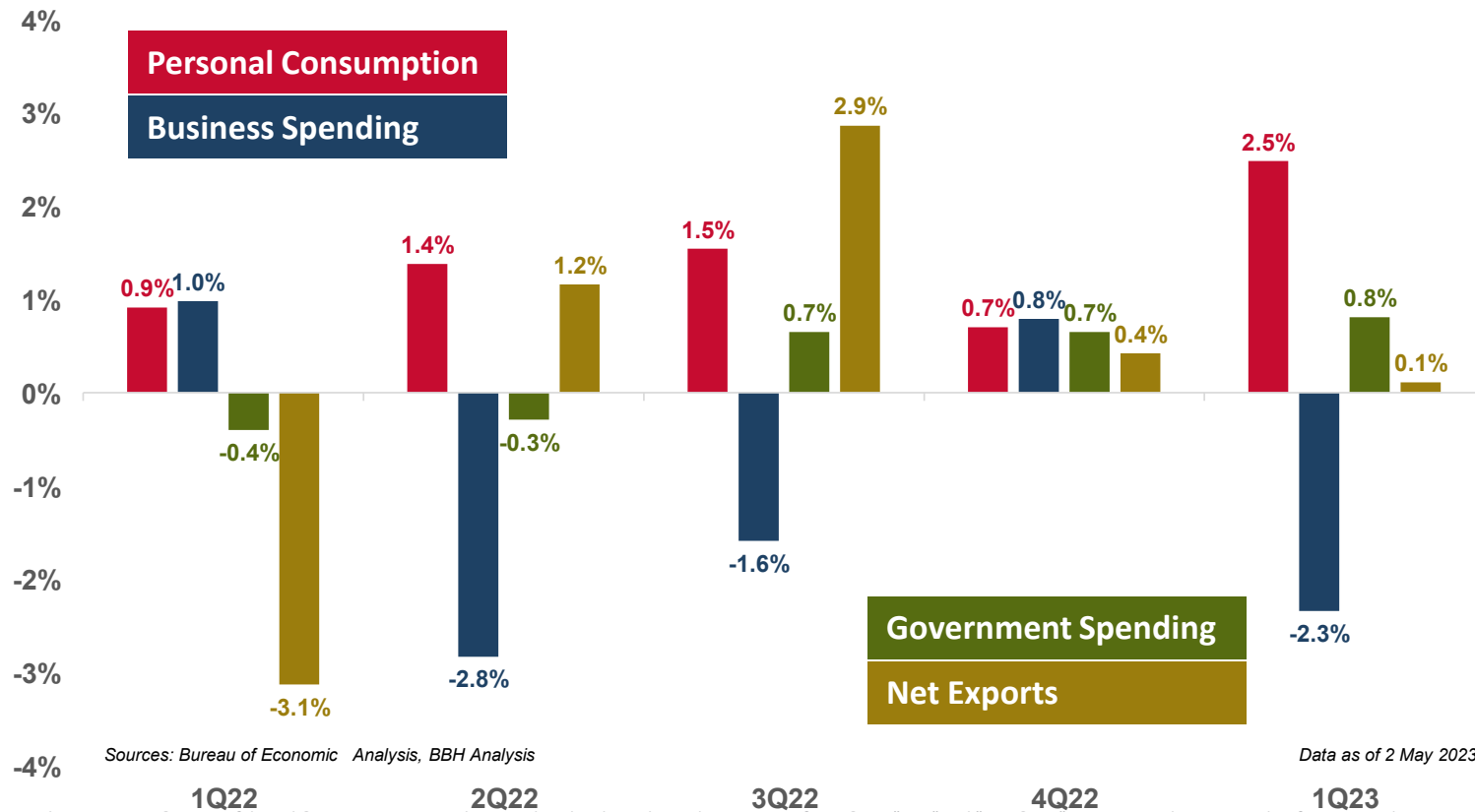
Recession Likelihood in 2023?

Housing Market	...	declining as mortgage rates rise.
Consumer Confidence	...	rebounding slightly from post-pandemic low levels.
Manufacturing Confidence	...	weak, although not as bad as consumer confidence.
Leading Economic Indicators	...	recessionary pattern.
Yield Curve	...	inverted for ten months and counting.
Banking Turmoil	...	potential for tighter credit standards and less lending.

= rising likelihood of recession in 2023.

First Quarter Report Card

Contributions to Gross Domestic Product

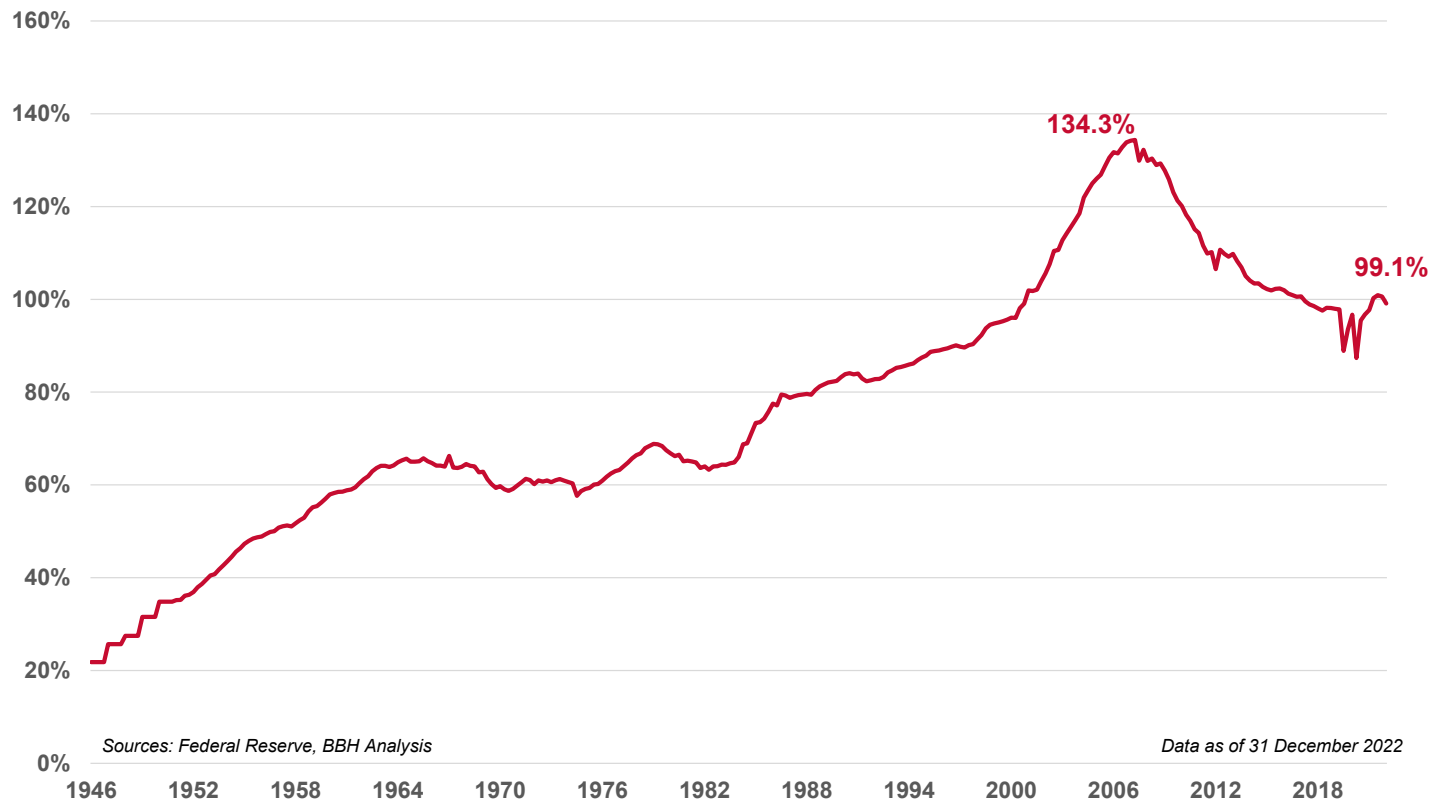


Sources: Bureau of Economic Analysis, BBH Analysis

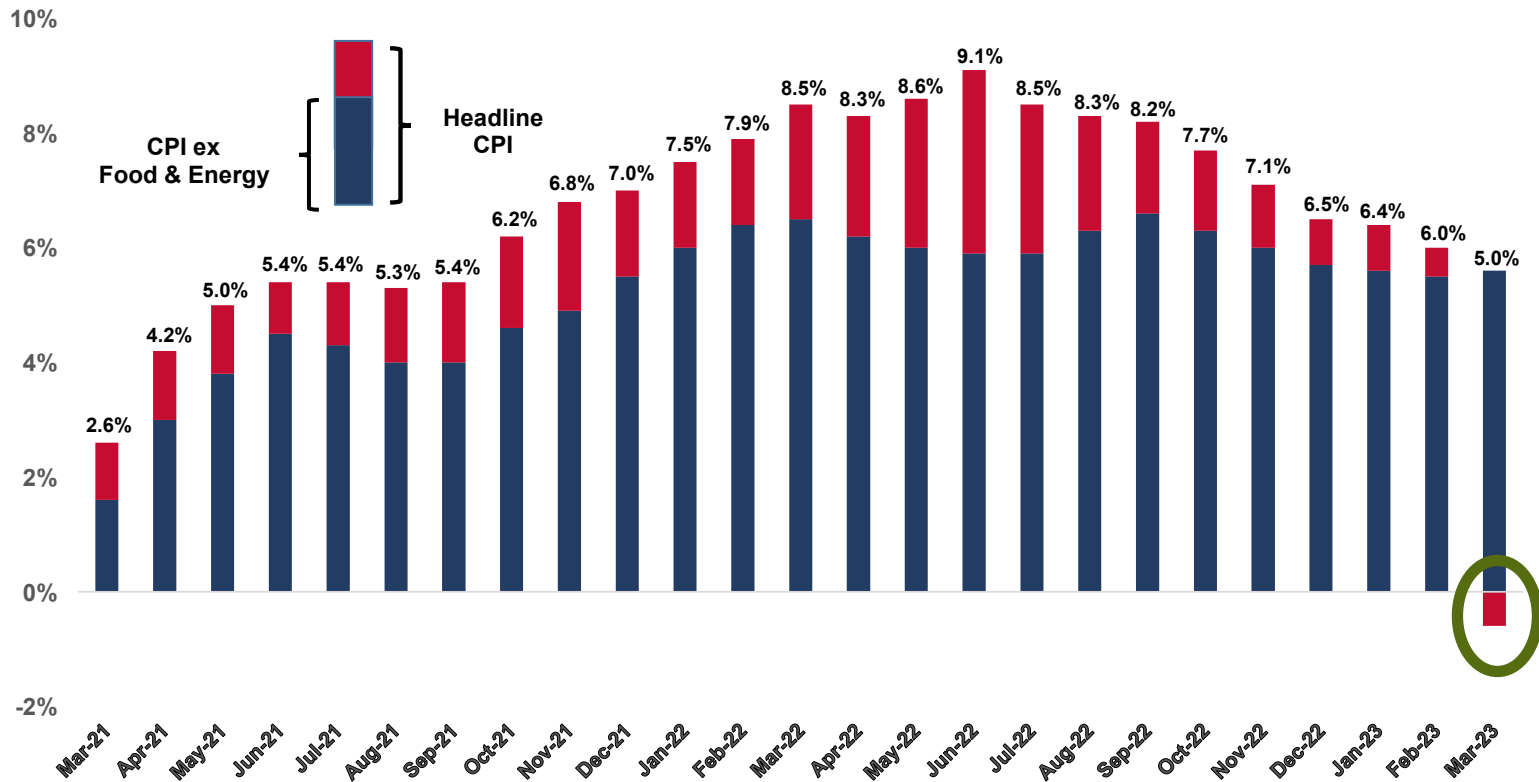
Data as of 2 May 2023

U.S. Household Balance Sheets

Debt to Income



Consumer Inflation

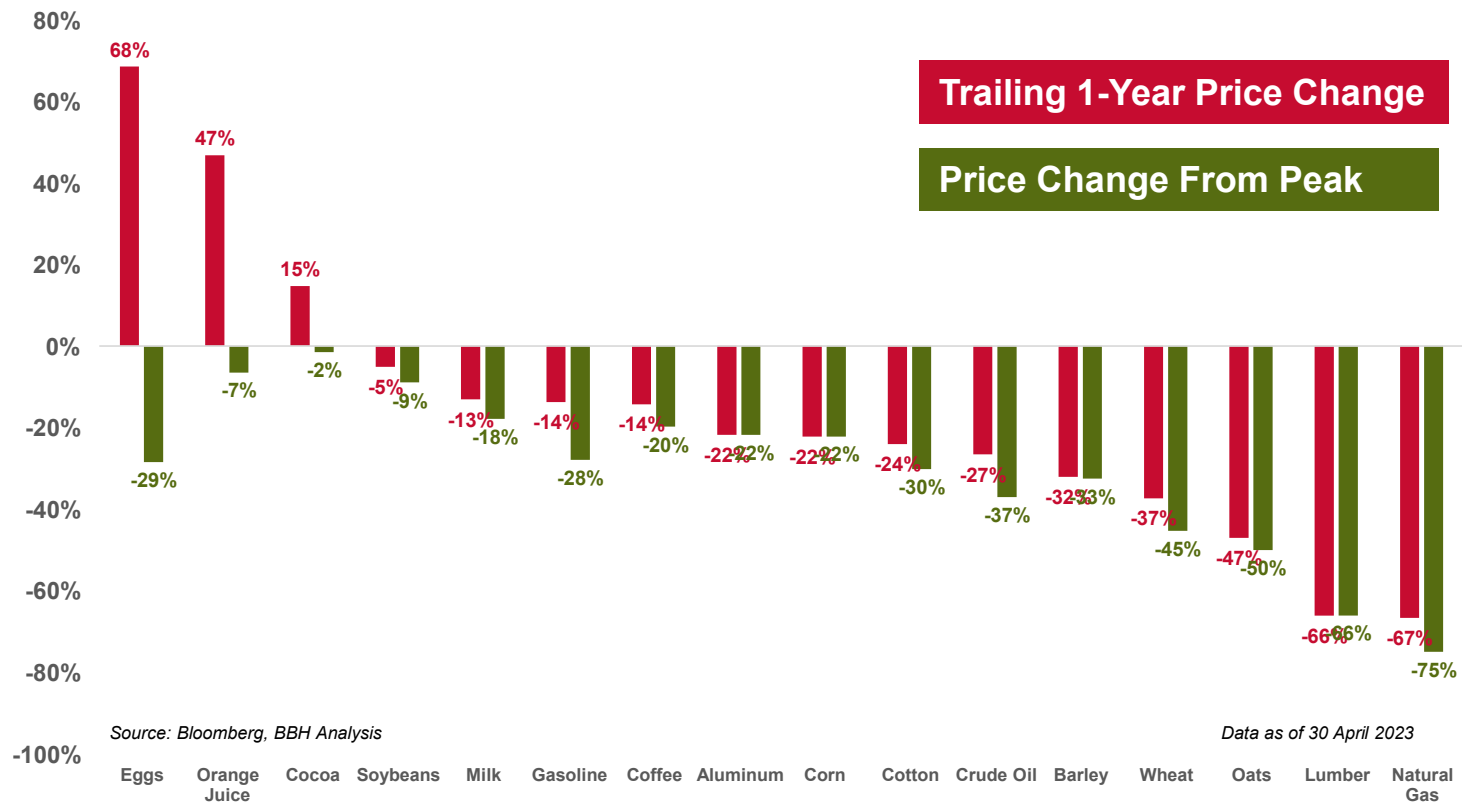


Sources: Bureau of Labor Statistics, BBH Analysis

Data as of 17 April 2023

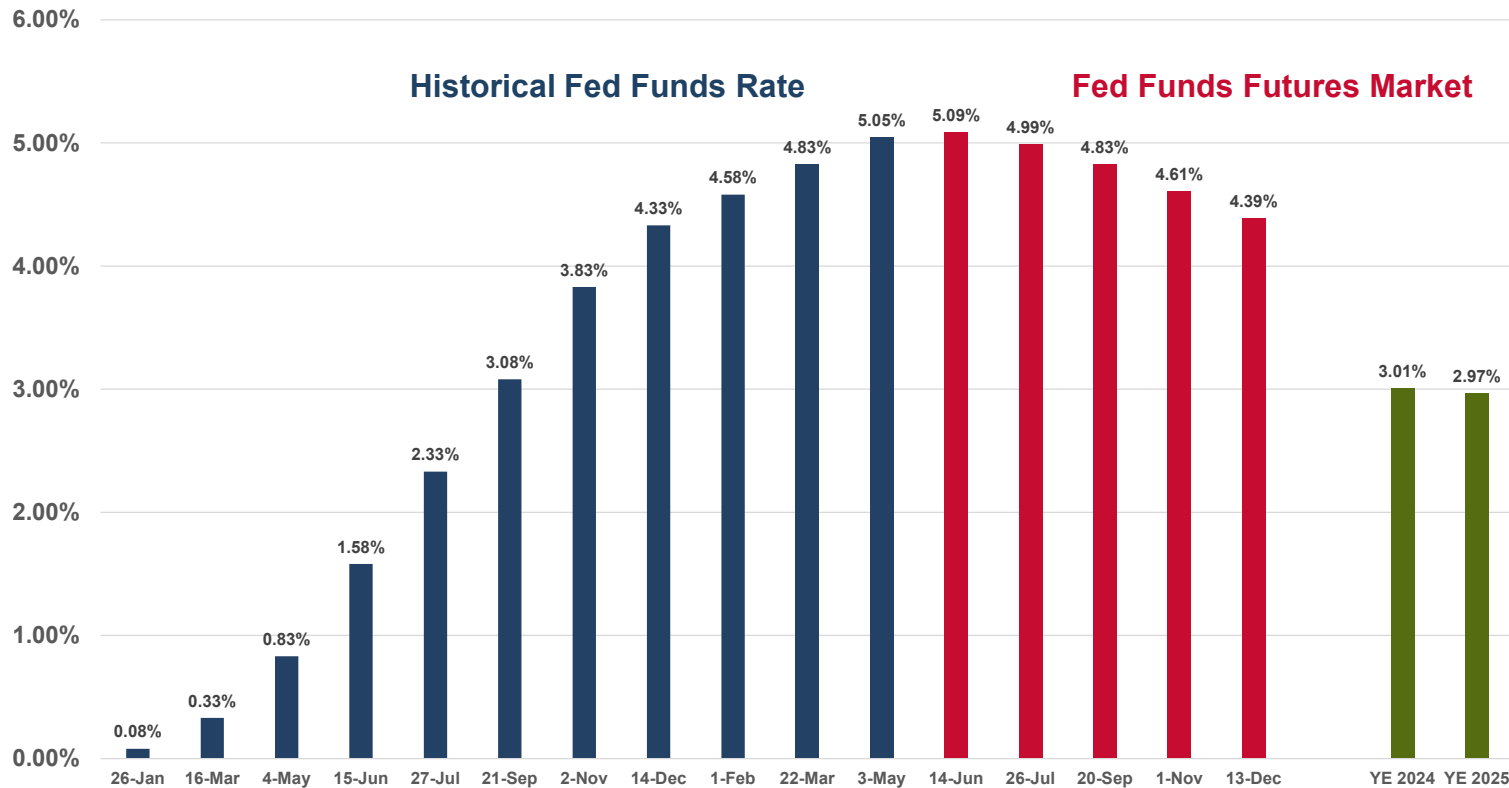
Select Commodity Prices

Changes As of 30 April 2023



The Path of Monetary Policy

Fed Funds Rates



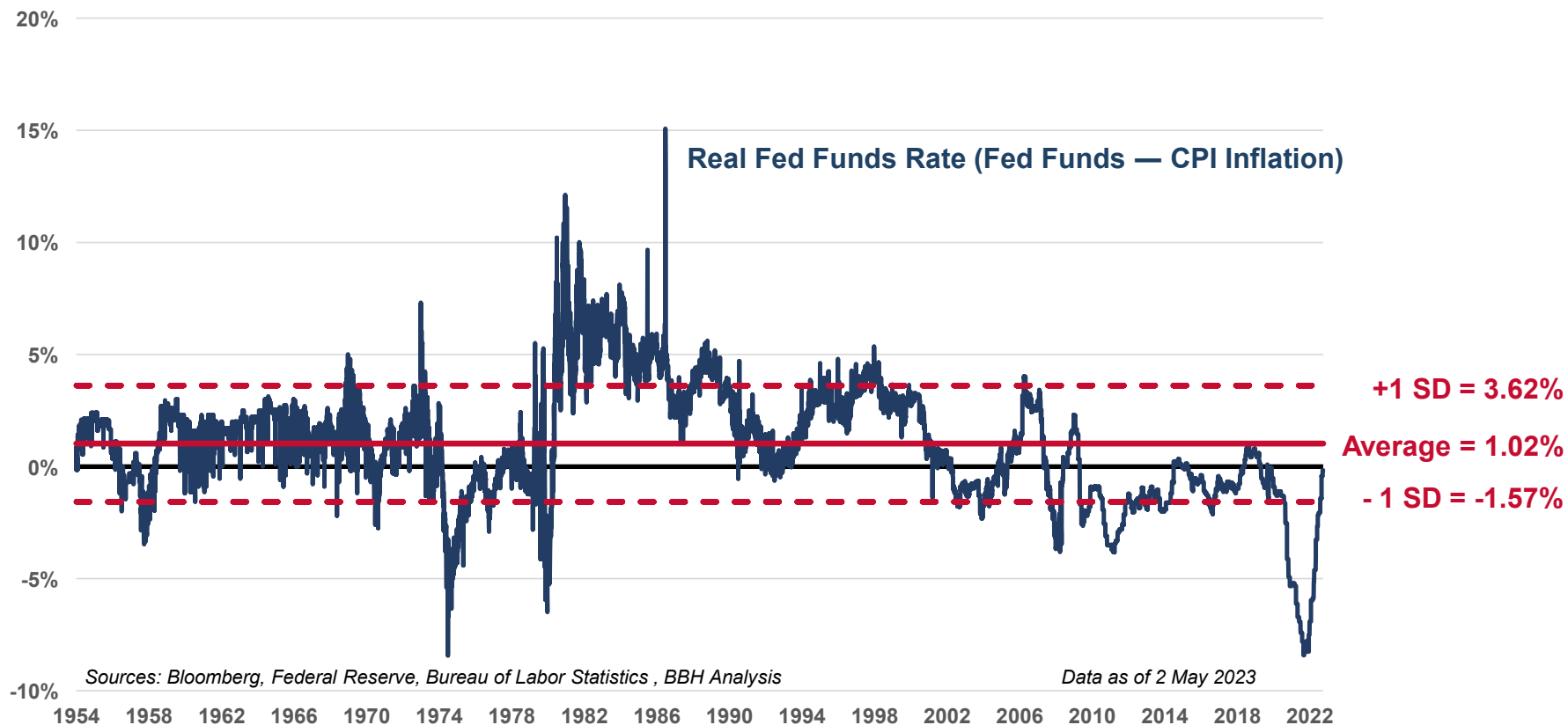
Sources: Federal Reserve, Bloomberg, BBH Analysis

Data as of 3 May 2023



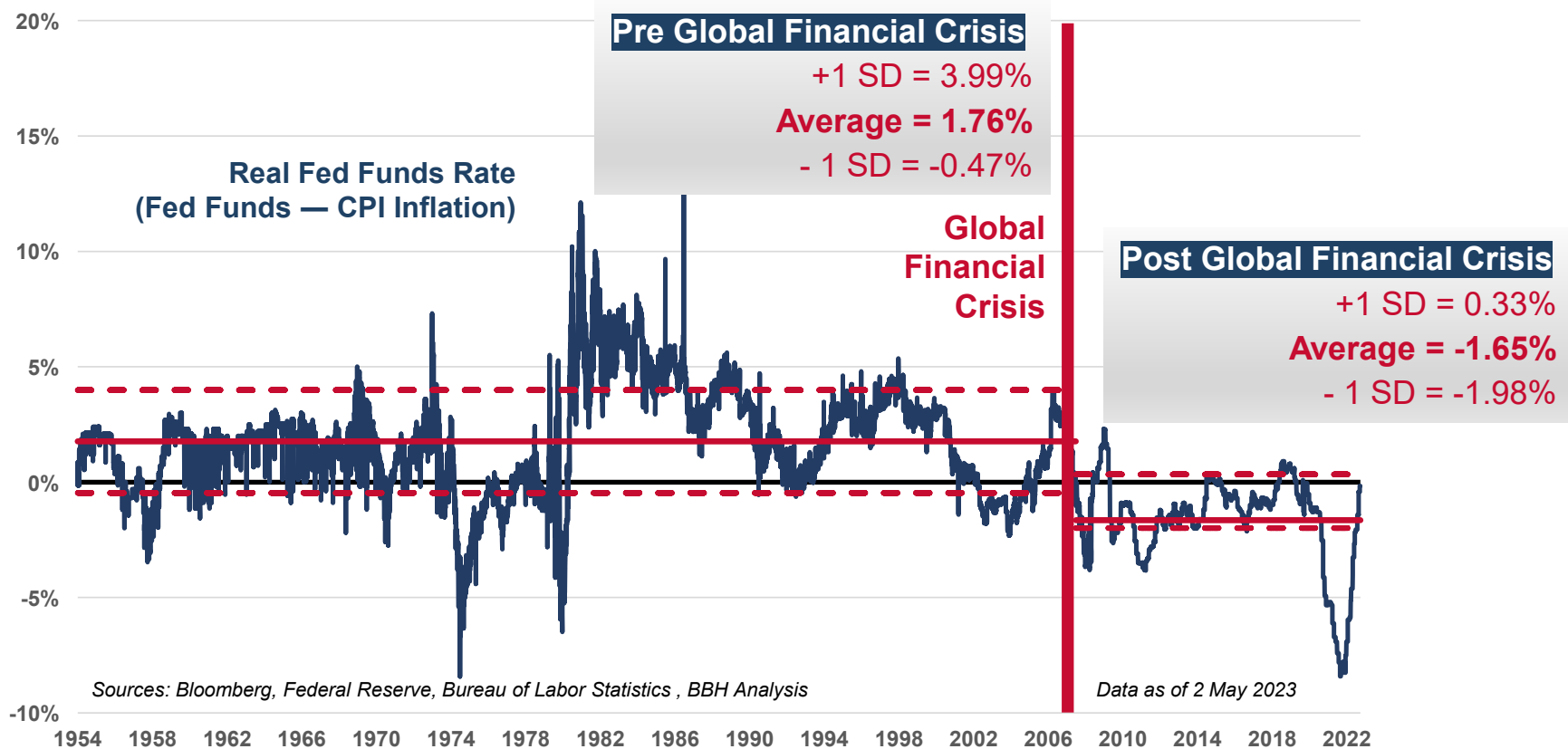
What Should the Fed Funds Rate Be?

Lessons From History

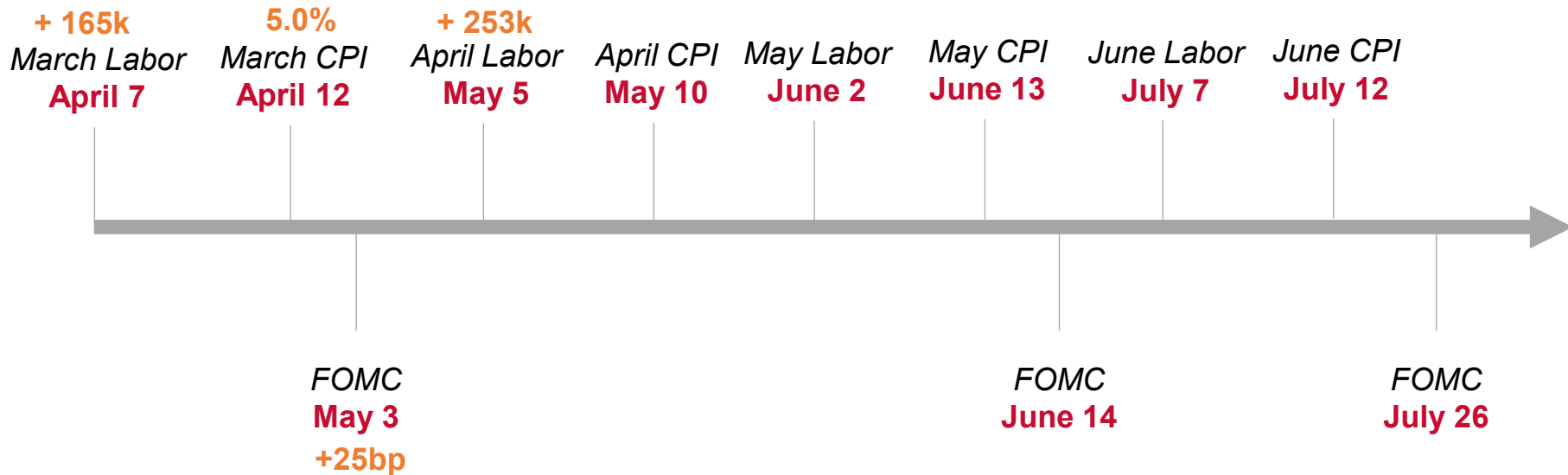


What Should the Fed Funds Rate Be?

Lessons From History



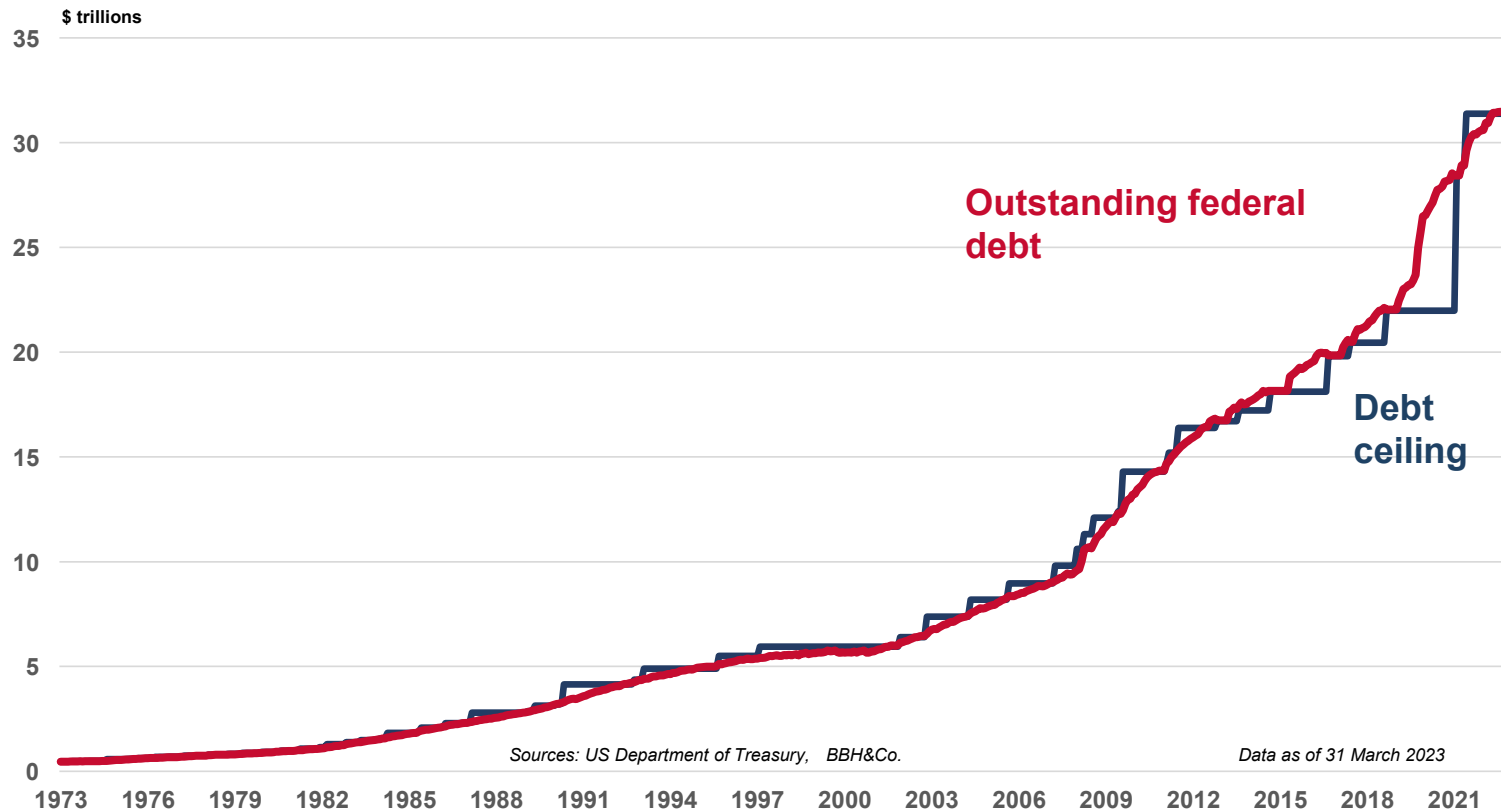
Dates to Watch



Sources: Federal Reserve, Bureau of Labor Statistics

Data as of 3 May 2023

The Debt Ceiling



The Debt Ceiling *Solutions?*

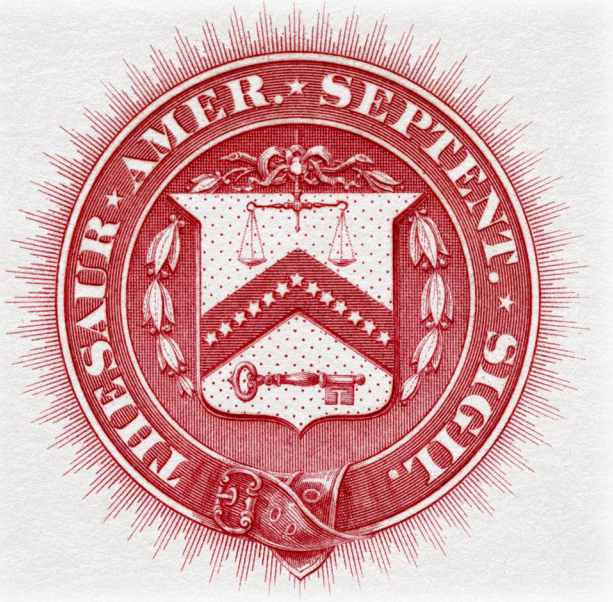


MINT THE COIN!

The U.S. Treasury mints a high-denomination platinum coin and deposits it at the Fed in exchange for cash.

The Debt Ceiling

Solutions?



ISSUE PREMIUM BONDS

Since only the face value of bonds count towards the debt ceiling, premium bonds would raise more cash than face value debt.

The Debt Ceiling Solutions?

We the People of the
insure domestic Tranquility, provide for the common defence
and our Posterity, We ordain and establish this Constitution

Article I

Section 1. All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

Section 2. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

No Person shall be a Representative who shall not have attained to the Age of twenty five Years, and seven Years a Citizen of the United States, who, when elected, shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to all whole Persons, including three fourths to all Persons (except Indians not taxed) three fifths of all other Persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and in every subsequent Term of seven Years on such Enumeration as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such Enumeration, shall be equal, the States of New Hampshire shall be entitled to three, Massachusetts eight, Rhode Island and Providence Plantations three, Connecticut five, New York seven, New Jersey four, Pennsylvania eight, Delaware three, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

When vacancies happen in the Representation from any State, the Executive Authority thereof shall fill the Vacancies with all such Qualifications as the House of Representatives shall have the Qualifications and other Officers, and shall have the sole Power of Impeachment.

Section 3. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof for six Years, and

THE 14TH AMENDMENT

“The validity of the public debt of the United States, authorized by law ... shall not be questioned.”

The Debt Ceiling

Solutions?

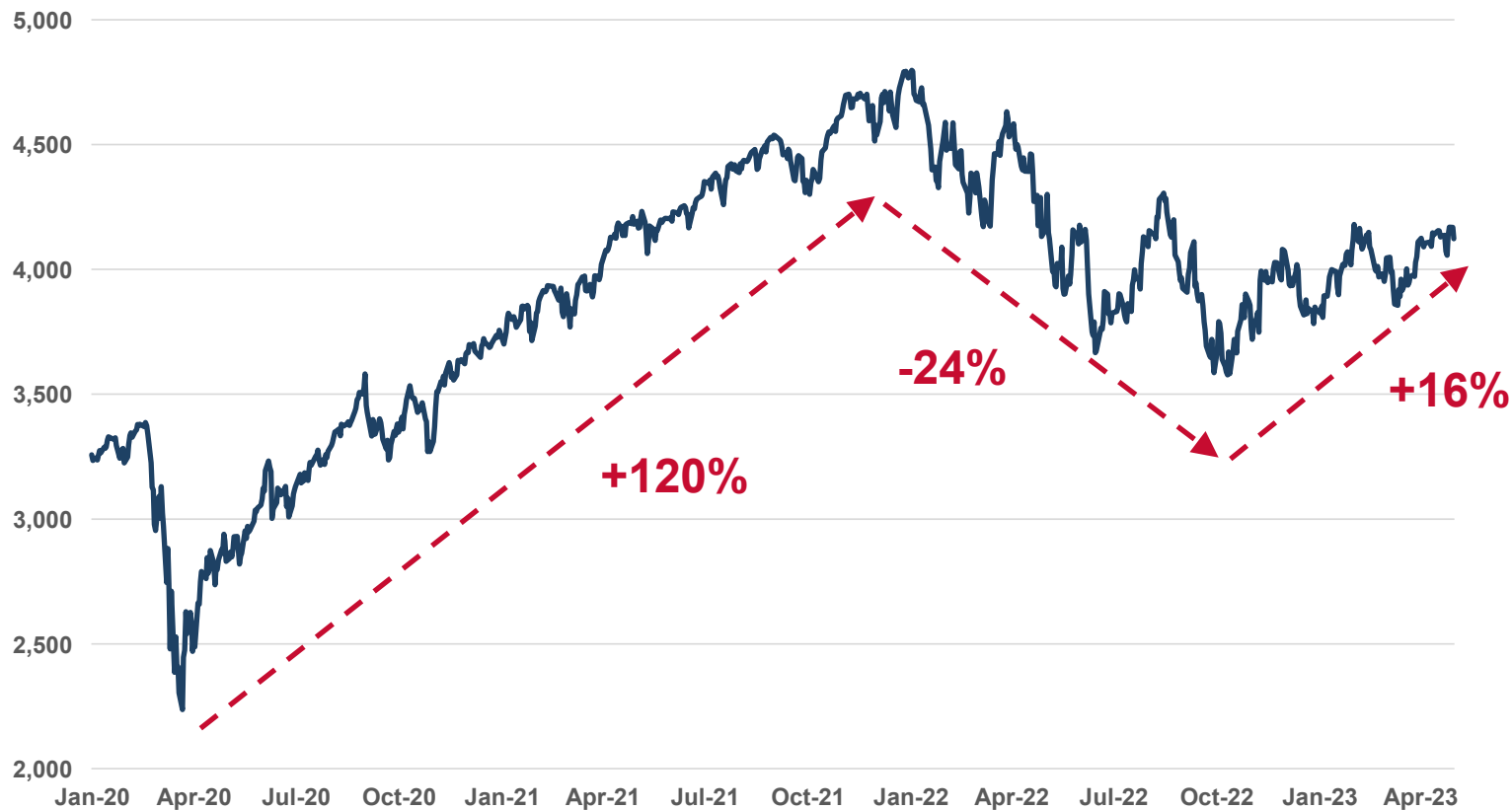


BRINKSMANSHIP

11th hour agreement once maximum political benefit has been wrung out of the debate.

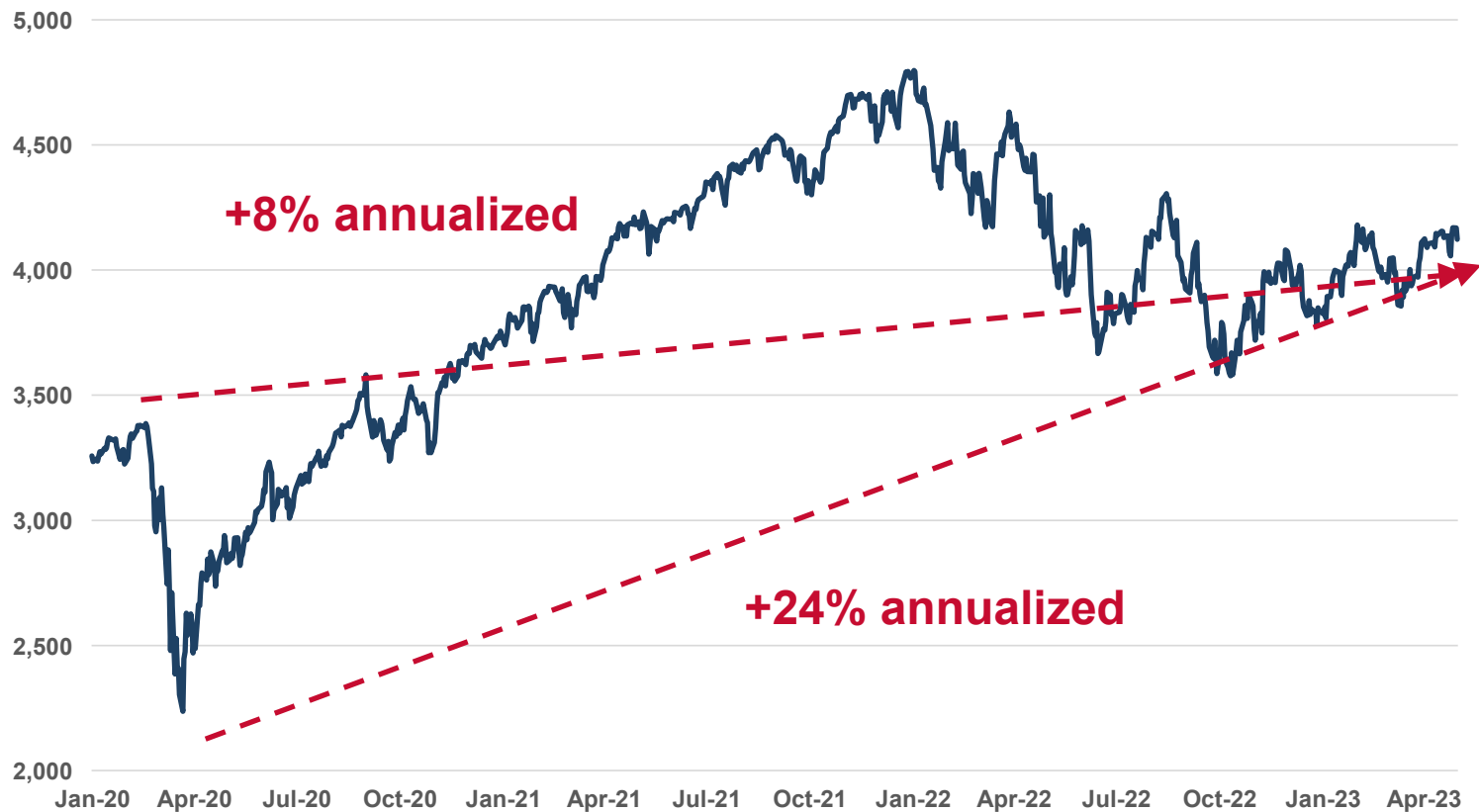
Equity Market Returns

S&P 500 Index Since Pandemic



Equity Market Returns

S&P 500 Index Since Pandemic



Equity Market Returns During Recessions

Beginning of Recession	Length of Recession in Months	S&P 500 Total Return			
		+1 months	+3 months	+6 months	+1 year
November 1948	11	5.3%	1.3%	-0.6%	19.2%
July 1953	10	-5.8%	0.5%	8.7%	31.9%
August 1957	8	-5.2%	-6.8%	-7.7%	10.0%
April 1960	10	2.7%	3.0%	-0.1%	24.2%
December 1969	11	-7.4%	-1.8%	-19.5%	3.9%
November 1973	16	2.0%	1.2%	-7.3%	-23.8%
January 1980	6	-1.6%	-5.6%	9.6%	19.5%
July 1981	16	-5.8%	-5.6%	-5.5%	-13.3%
July 1990	8	-9.0%	-13.8%	-1.6%	12.7%
March 2001	8	7.8%	5.9%	-9.7%	0.2%
December 2007	18	-6.0%	-9.4%	-11.9%	-37.0%
February 2020	2	-12.4%	3.6%	19.6%	31.3%

Past performance does not guarantee future results.
Sources: National Bureau of Economic Research, Bloomberg, BBH Analysis

Data as of 30 September 2022



A Stormy Spring

An Economic Weather Report for 2023

G. Scott Clemons, CFA

Partner & Chief Investment Strategist
Brown Brothers Harriman & Co. Private Banking
scott.clemons@bbh.com

10 May 2023

 @GSClemons

 Scott Clemons



Sponsor Spotlight



Driving Performance Through Engagement



Jeff Kopenitz
CI Consulting Partners

Striving for the Win's



“Having the right people in the right place with the capability to improve the right things.....”

with the X's and O's

(how's the game being played)

Industry Week.....

Disrupted supply chains, labor shortages, and economic challenges have intensified pressures for manufacturers to digitize and build more cost-efficient organizations. Forward-thinking manufacturers are turning to shop floor digitization to enhance operational efficiency and future-proof their operations. But to reduce cost on the factory floor, manufacturers need to think beyond equipment automation and focus on their workforce—and how workers get work done.

What can we do?

Manufacturers need to act to attract and retain talent.
Between 2020 and 2030, 2.1M jobs could go unfilled due to the manufacturing skills gap.

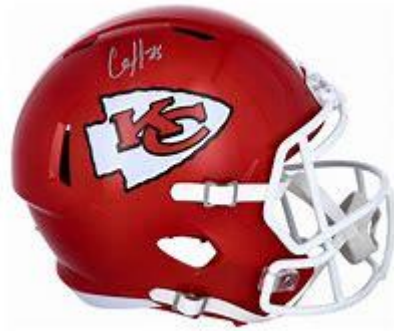
Source: "Creating pathways for tomorrow's workforce today," Deloitte and The Manufacturing Institute, 2021

What are we doing with the talent that we have today?

So, What Happened?



VS.



How well were the X's & O's executed in the game?

"It's a frustrating one," center Jason Kelce said.

"Not up to our standards. I feel like we got a little uncharacteristic on a lot of things. I got to hand it to them, they did a good job. We just didn't come up when it mattered. We had a shot," Eagles defensive end Josh Sweat told USA TODAY Sports postgame.

It's difficult to pinpoint exactly why the Eagles, who outgained the Chiefs 417-340 in total yardage and held the ball for more than 10 minutes longer than Kansas City (35:47-24:13), were not able to hold on in the second half against a hobbled Mahomes, but the most obvious reason is that they were probably not aggressive enough on defense. Facing a quarterback who was literally playing on his last leg (er, ankle), the Eagles played not to lose the game instead of to win it.

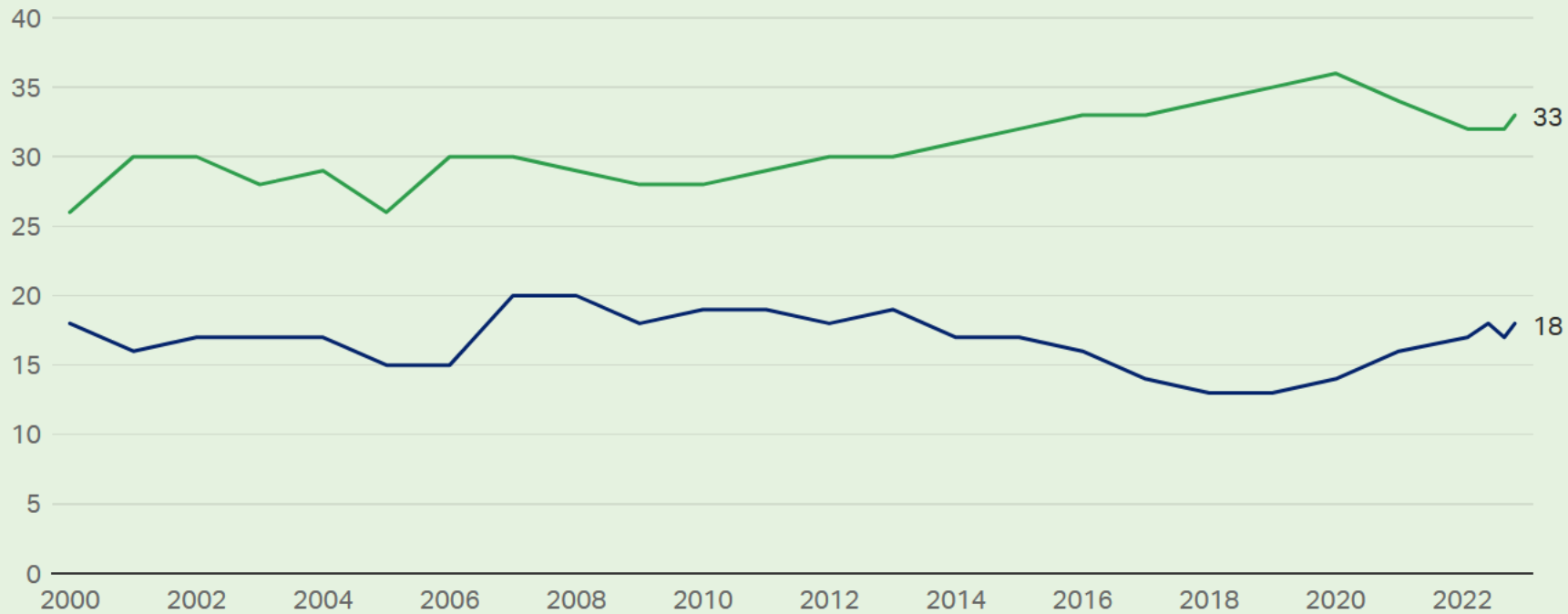
The Eagles, who led the NFL with 70 sacks during the regular season, failed to sack Mahomes once during Super Bowl LVII, and that lack of pressure was likely the biggest reason why Philadelphia lost on Sunday night.

Game Leaders		TEAM STATS	
Passing Yards			
 P. Mahomes 21-27, 182 YDS, 3 TD	 J. Hurts 27-38, 304 YDS, 1 TD	 J. Hurts 27-38, 304 YDS, 1 TD	 P. Mahomes 21-27, 182 YDS, 3 TD
Rushing Yards			
 I. Pacheco 15 CAR, 76 YDS, 1 TD	 J. Hurts 15 CAR, 70 YDS, 3 TD	 J. Hurts 15 CAR, 70 YDS, 3 TD	 I. Pacheco 15 CAR, 76 YDS, 1 TD
Receiving Yards			
 T. Kelce 6 REC, 81 YDS, 1 TD	 D. Smith 7 REC, 100 YDS	 D. Smith 7 REC, 100 YDS	 T. Kelce 6 REC, 81 YDS, 1 TD
Full Box Score			
Team Stats			
Total Yards		Turnovers	
KC	340	KC	0
PHI	417	PHI	1
Possession		1st Downs	
KC	24:13	KC	21
PHI	35:47	PHI	25
1st Downs			
1st Downs: 21 (KC) vs 25 (PHI)			
Passing			
Comp-Att: 21-27 (KC) vs 27-38 (PHI)			
Yards per pass: 6.7 (KC) vs 7.6 (PHI)			
Interceptions thrown: 0 (KC) vs 0 (PHI)			
Rushing			
Rushing Attempts: 26 (KC) vs 32 (PHI)			
Yards per rush: 6.1 (KC) vs 3.6 (PHI)			
Red Zone (Made-Att)			
4-5 (KC) vs 3-5 (PHI)			
Penalties			
3-14 (KC) vs 6-33 (PHI)			
Turnovers			
Fumbles lost: 0 (KC) vs 1 (PHI)			
Interceptions thrown: 0 (KC) vs 0 (PHI)			
Defensive / Special Teams TDs			
1 (KC) vs 0 (PHI)			
Possession			
24:13 (KC) vs 35:47 (PHI)			

The Gallup Survey

U.S. Employee Engagement Trend

— % Engaged — % Actively disengaged



[Get the data](#) • [Download image](#)

GALLUP

November 2022

Engaged – 33%

Not Engaged – 49%

Actively Disengaged – 18%

Kopenitz Research....

13 companies
40 participants
Company Size – 5 to 4,000
Level – Operators to Senior Leadership

	Question	%
Direction Known	2	64.4
Engaged	3a	37.7
Not Engaged	3b	51.9
Disengaged	3c	10.6
Actively Engaged in improvement	4	31.9
Want to help	5	95



1. Estimate how many employees are in your department or plant?
2. What % of those employees would you estimate understand or know the direction / goal of the department / plant?
3.
 - A) Engaged – You have my hands, heart and mind
 - B) Not Engaged – you have my hands (I do my 8 and I hit the gate)
 - C) Disengaged – Neither my hands, heart or mind
4. Estimate what % of your associates are actively engaged in some type of Continuous Improvement effort.
5. Do you believe more associates want to help improve the department? YES or NO

How can we capitalize on this desire?
How can we **bridge** this gap?

A few questions concerning your journey?

- Are you satisfied with your results?
- Have they been sustainable?
- Is Continuous Improvement really **Continuous**?

What is driving this?

- Driving improvement through workshops and a handful of experts.....

The RED Line

Yes, we want to improve ~~But~~ aka: Daily Business

- We get paid for this.....

Schedule

Lack of Capabilities

NO TIME

Daily Work OR Improvement?

So, we need a strategy that includes improvement in our daily work!



However, a strategy is only as good as its IMPLEMENTATION!!

Everybody,
everyday,
every
process

The three important
factors for success of a strategy

Success = Ability x Direction x Motivation



Why recognizing the root cause is so important.....

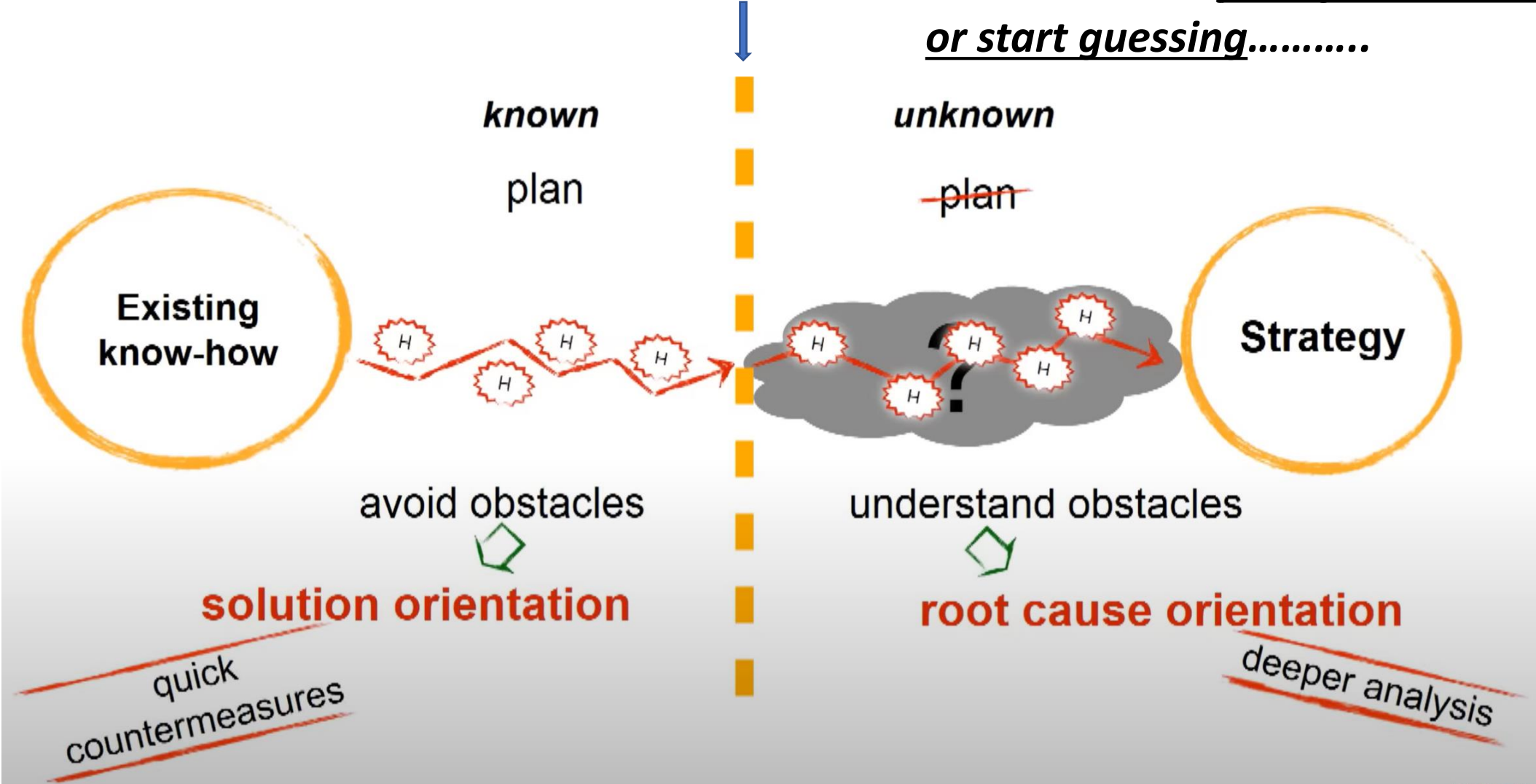
When striving for a strategy at some point in time we will need to leave the **known** zone



unknown zone! The zone where we don't have solutions anymore!

Traveling into the unknown zone..... brings us to our

Knowledge Threshold – the area where we have no facts or data and *In this zone we jump to conclusions or start guessing.....*



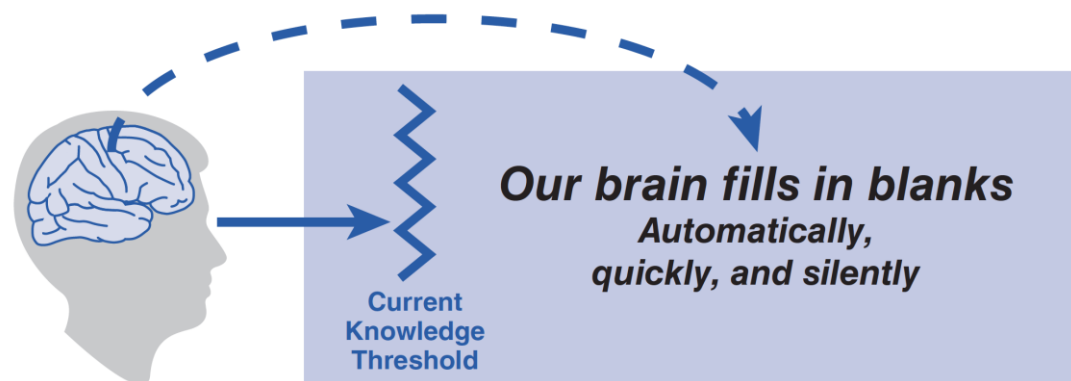
... Which causes some problems

Our judgements are not always correct. We feel certain and then we make faulty decisions.

What do you see in this picture?



The legs are not shiny. It's just some white paint.



A Countermeasure to this is **SCIENTIFIC THINKING**

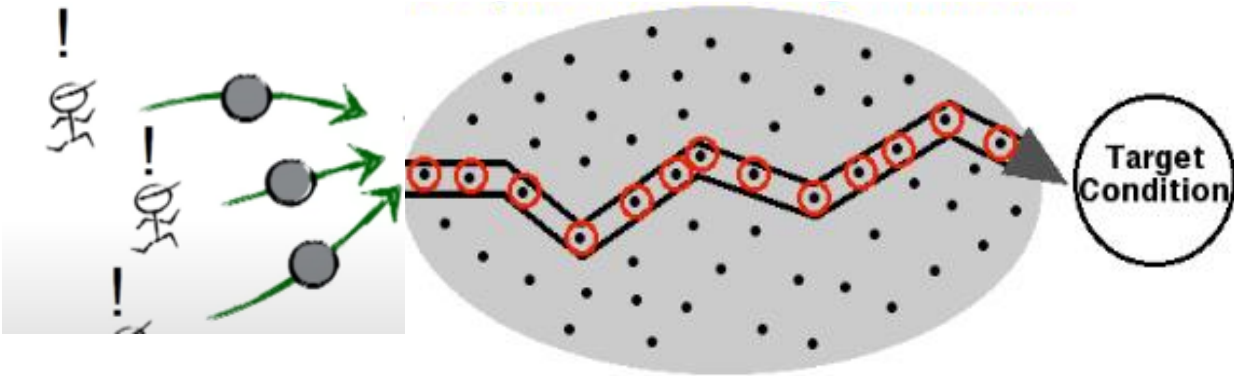
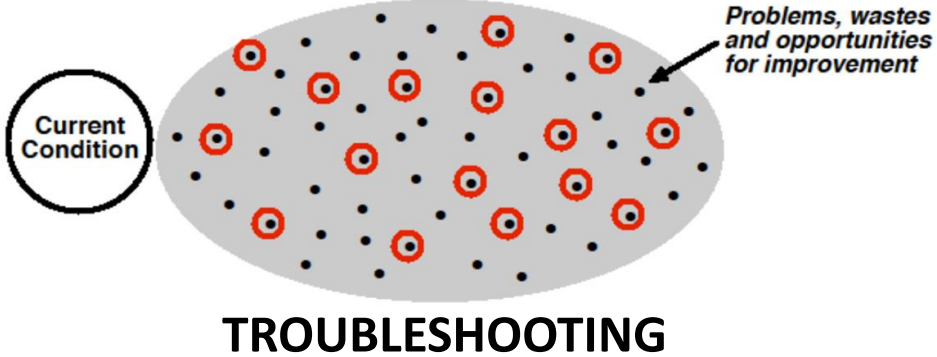


A routine of intentional coordination between what we predict will happen next, seeing what happens, and adjusting based on what we learn from the difference.



Next let's talk about Direction the need to align our resources.....

Success =
Ability x
Direction
x Motivation



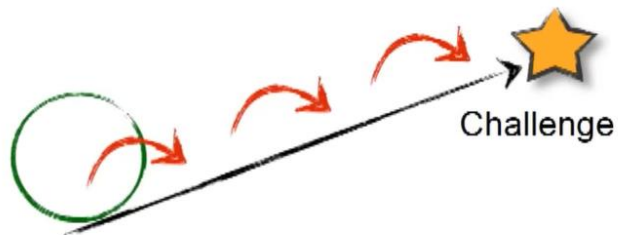
With direction we move towards the future

Reference: Tilo Schwartz & Mike Rother

That Direction is known as a Challenge! Why a Challenge?

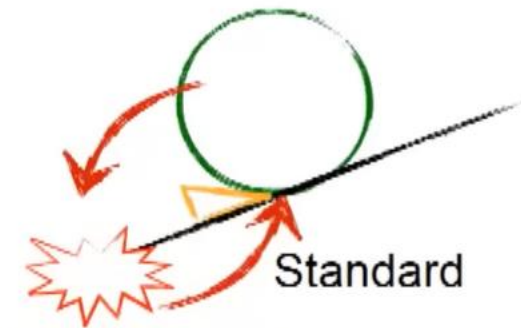
- Because we usually manage by EXCEPTION!
- A standard is in place and a deviation takes place we work to bring the measurement back to standard
- Is this really improvement?? No!

Improvement-PULL



What we need is a Challenge that continuously sets the bar higher and PULLS our people to IMPROVE every day!!

Management by Exception



The habits change behaviors & we start to

**Make striving for a challenge and systematic
problem solving an every day habit.**

Called The Improvement & Coaching Kata

What patterns do we need in CI?

Which patterns exist today and which must we develop?



react on deviation

experience & assumption

solution oriented

plan and control
implementation



strive for a challenge

get the facts

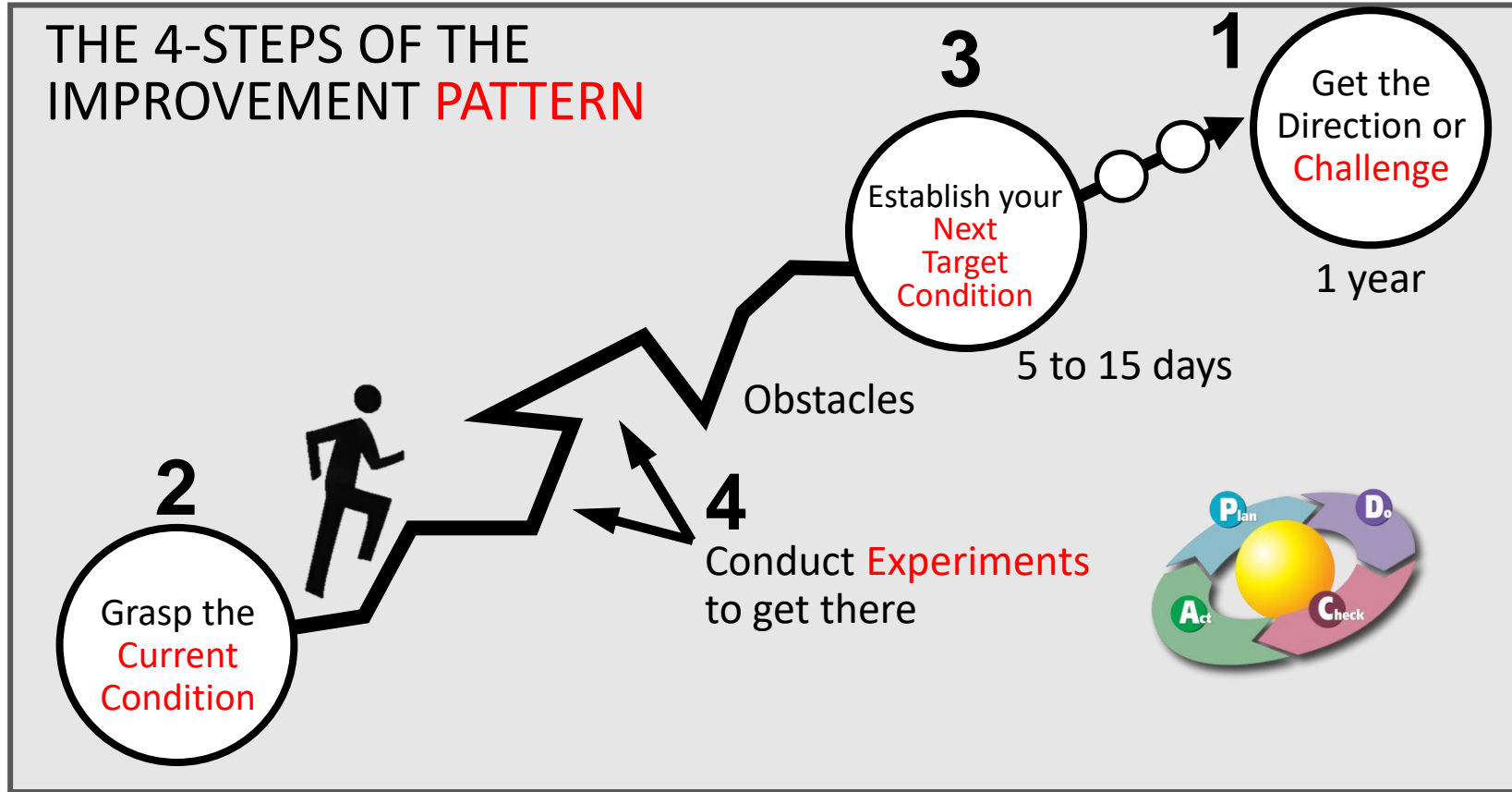
go & see

understand root cause

experiment &
validate quickly

**Improvement
Kata**

Here is our improvement model?



1. Understand the direction
2. How does the current state look?
3. Establish a target condition and expectation.
4. Experiment towards the established target condition through P-D-C-A cycles.

The Coaching-Kata is the corresponding management pattern to deliberately train the improvement-kata

Improvement-KATA

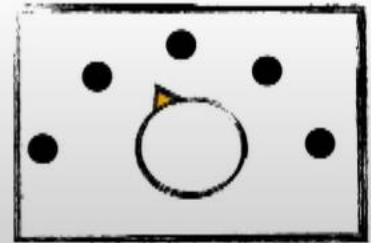
- (1) Always strive for a challenge
- (2) Go & see - get the facts
- (3) Understand root cause
- (4) Validate quickly by experiment



Coaching-KATA

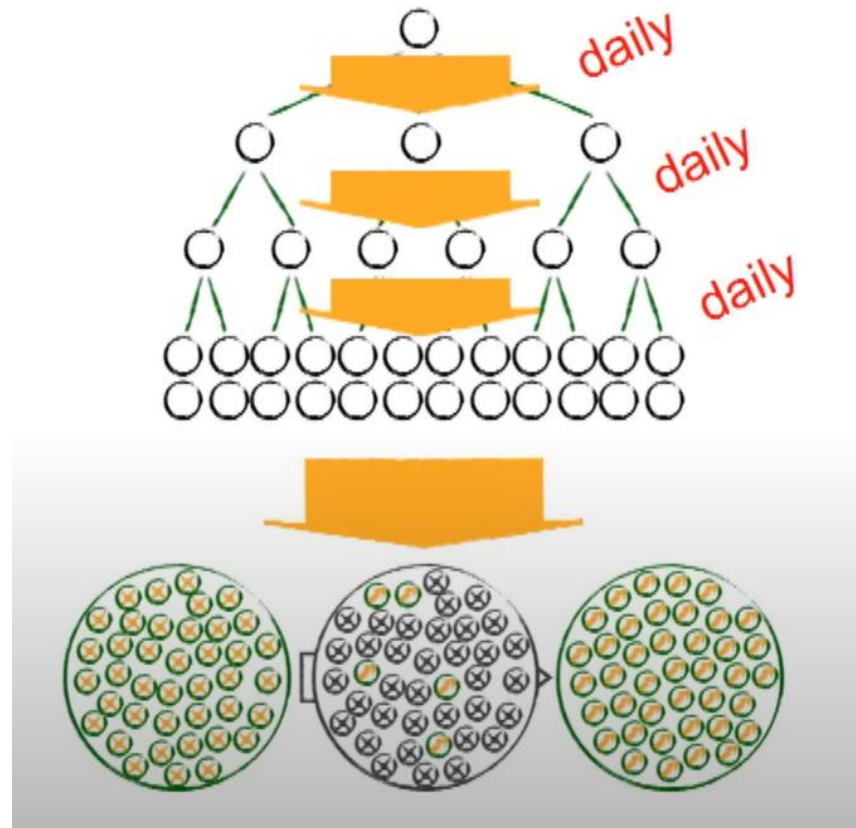
- (1) What is the **Target-Condition**...?
- (2) What is the **Actual-Condition** now?
- (3) ...which **obstacle** are you addressing now, and what exactly is the **problem**?
- (4) What is therefore your **next step** and what do you **expect**?
- (5) When can we go and see, what we have learned from taking that step?

Behavior-Pattern



Management-Pattern

Any strategy is just as good as the ability to implement it. Therefore, make striving for a challenge and systematic problem solving an everyday habit..... thus ENGAGE YOUR MOST VALUABLE RESOURCE.....





Sponsor Spotlight

Mufson Howe Hunter
Investment Bankers for *Growth*

Accountability and Motivational Tools for Leaders



JR McGee
Owner
X-Stream Leadership Group



May 16, 2023
Slide 103

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Thank you

