

Præsentationer fra besøg

Innovation Center Denmark (ICDK) Boston

INNOVATION CENTRE DENMARK

DANISH IDEAS. GLOBAL SOLUTIONS.



WELCOME TO BOSTON

**THE THE CITY OF COPENHAGEN
EMPLOYMENT & INTEGRATION COMMITTEE**

Ann-Christina Petersen Lange,
Patrick Risager Mikkelsen & Natasia Lundqvist
Innovation Centre Denmark Boston
October 10, 2023

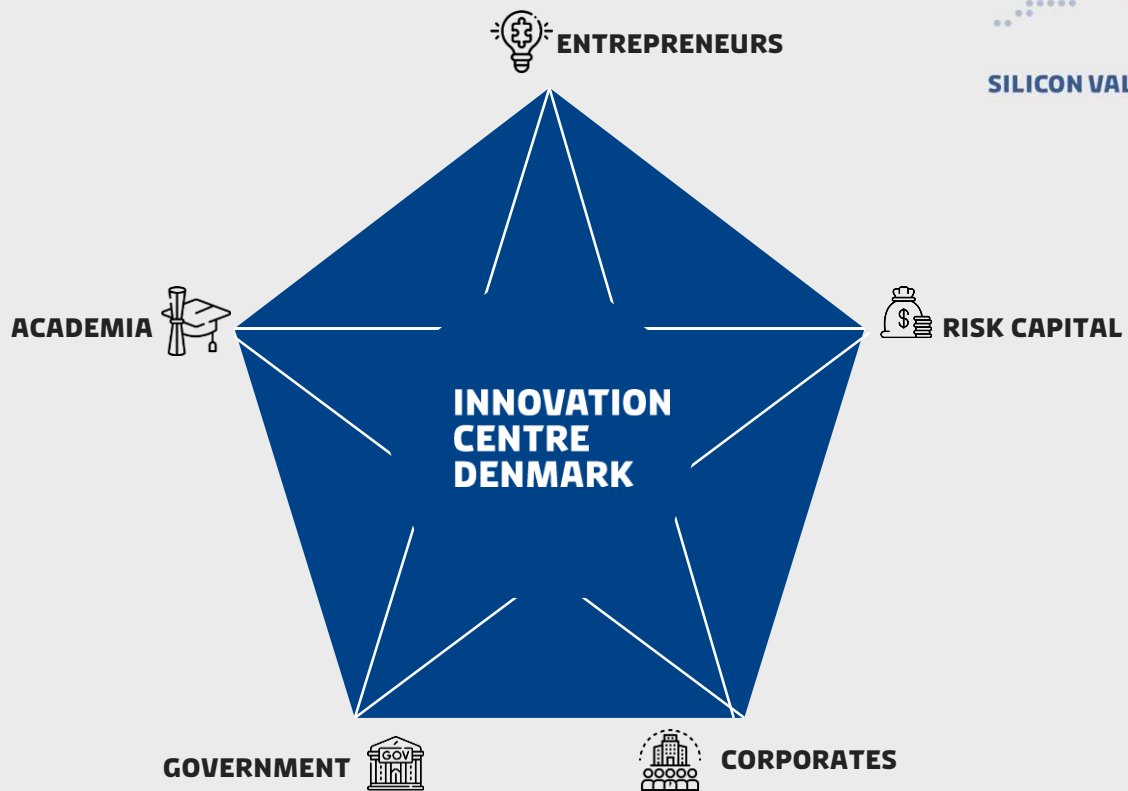


**MINISTRY OF FOREIGN AFFAIRS
OF DENMARK**



**Ministry of Higher
Education and Science
Denmark**

INNOVATION CENTRE DENMARK BOSTON



MISSION

TO BUILD BRIDGES AND FACILITATE RESEARCH BETWEEN RESEARCH INSTITUTIONS, PHARMA/TECH COMPANIES, AND HOSPITALS IN DENMARK AND BOSTON; ACCELERATE ENTRY OF DANISH COMPANIES INTO GREATER BOSTON AREA

VALUE

STRONG LIFE SCIENCES NETWORK & STRATEGIC EXPERTISE TO CONNECT AND COLLABORATE WITH THE RIGHT LOCAL ENTITIES, PUBLIC AND PRIVATE ACTORS FOR DANISH STAKEHOLDERS

TEAM

COMPOSED OF STRONG PROJECT CAPACITY COUPLING SCIENTIFIC AND BUSINESS BACKGROUNDS, WITH DIVERSE ACADEMIC PROFILES

FOCUS AREAS

HEALTH AND LIFE SCIENCE



**MEDTECH,
PHARMA,
& BIOTECH**

**HOSPITALS
& CLINICAL
INNOVATION**

**AI HEALTH,
QUANTUM**

RESEARCH AND EDUCATION



E-SHIP

EDUCATION

**FELLOW-
SHIPS**

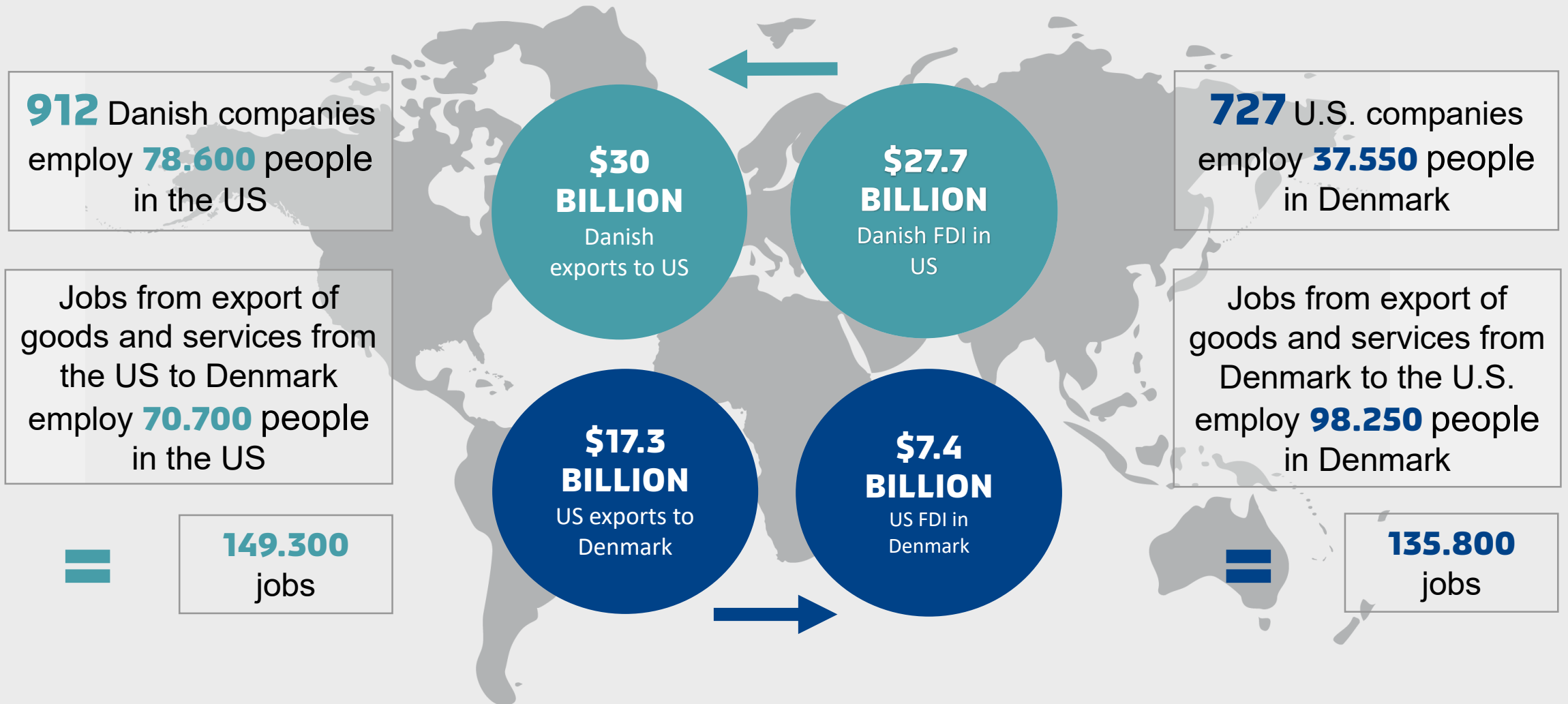
GREEN TRANSITION



**RENEWABLE
ENERGY**

BIOSOLUTIONS

US-DK: ECONOMIC IMPACT



GREAT(ER)

THE BOSTON ECOSYSTEM: FACTS

55

INSTITUTIONS OF
HIGHER LEARNING

ELITE UNIVERSITIES DRAW THE WORLD'S BRIGHTEST AND MOST AMBITIOUS MINDS IN RESEARCH TO BOSTON

The universities and institutions of higher learning are actively contributing to the innovation mindset and the high level of talent and knowledge forstere entrepreneurship and attracts special life-science and artificial intelligence companies to the ecosystem

A WEALTHY ECOSYSTEM FOR INNOVATION FUNDING

Massachusetts has the most robust and intelligent risk capital in the life sciences space. Firms here are willing to take risk in bankrolling transformational new fields like digital health. During the first six months of 2022, more than \$5 billion in venture capital was invested in life science companies headquartered in Massachusetts, representing 26% of all VC-funding in the US during the first half of the year.

> \$5B
VC FUNDING IN
Q1-Q2 2022

500

MEDICAL DEVICE
MANUFACTURING
COMPANIES

HOW MASSACHUSSETS BECAME AND LEADS AS A NATIONAL LEADER IN HEALTHCARE

Massachusetts remains the top NIH-funded state per capita. Five of the top six NIH-funded independent hospitals in the United States are located in Boston. With close to 25,000 people working in the medtech sector and about **500 medical device manufacturing companies**, Massachusetts also ranks third in the US for overall employment in the medtech sector.

FROM BIOTECHS TO HOME OF PHARMA & BIOTECH CORPORATIONS

Boston is home to more than **1,000 biotechnology companies**, ranging from small start-ups to billion-dollar pharmaceutical companies e.g. Novartis, Pfizer, Amgen, Sanofi etc. Almost **20 of the top 25 medtech firms worldwide** are located here, or have significant presence here, and these companies play a huge role in maintaining the life science ecosystem.

1000

79

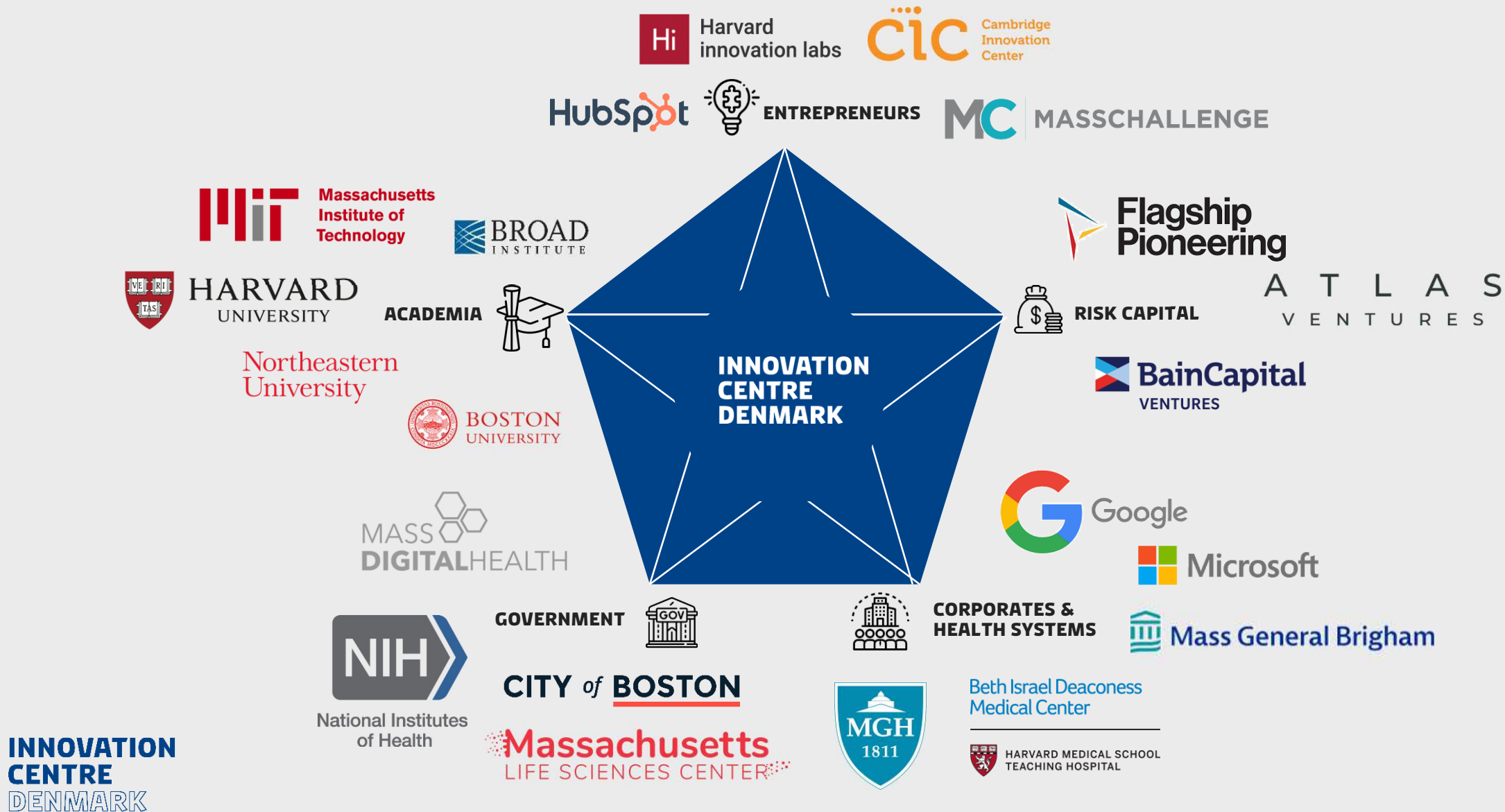
HOSPITALS IN
MASSACHUSSETS

MASSACHUSSETS, HOME TO THE BEST INSTITUTIONS IN THE WORLD

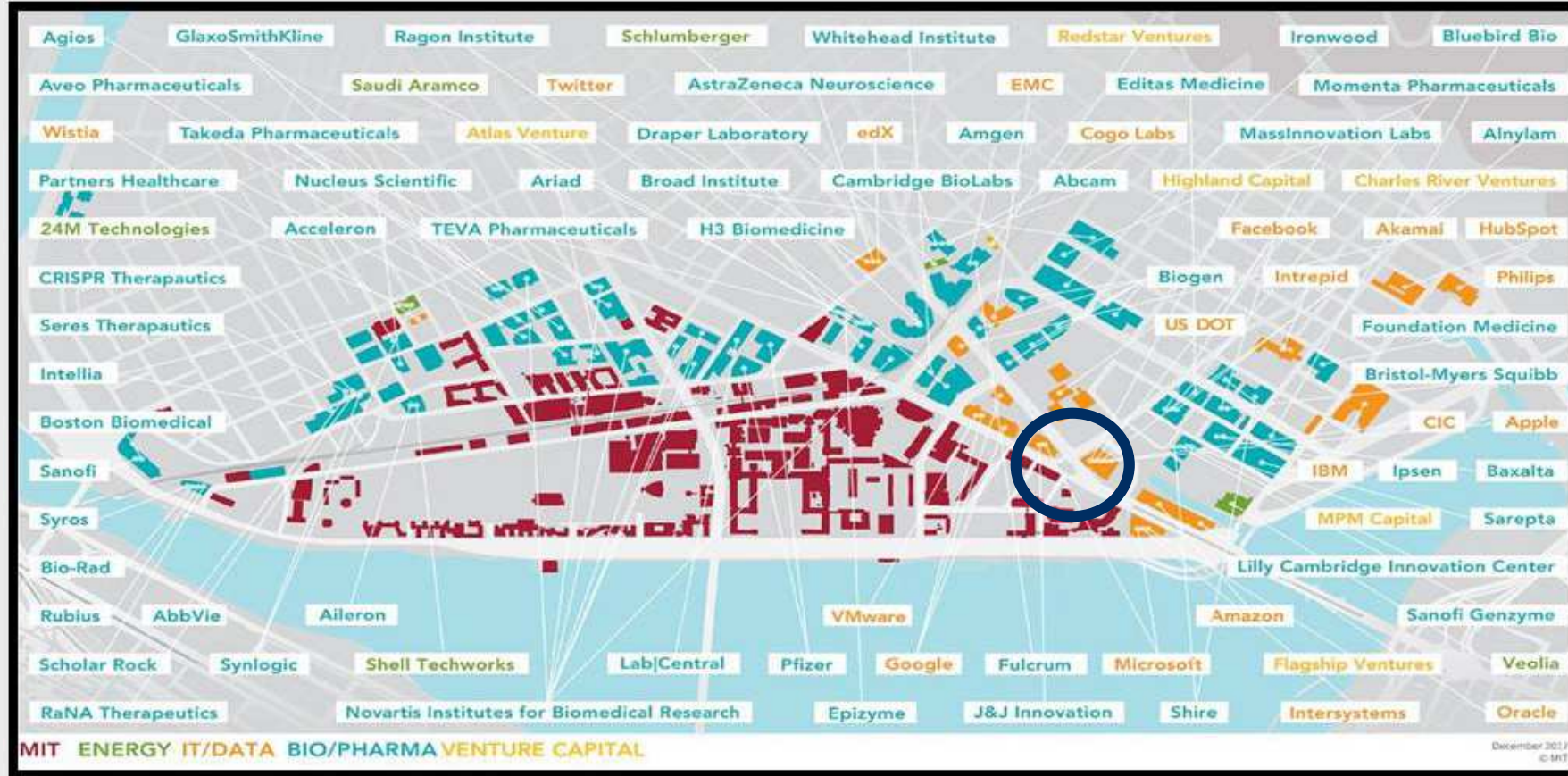
Massachusetts has a strong healthcare innovation infrastructure. It is home to 79 hospitals, including top academic medical centers and research institutions such as **Massachusetts General Hospital** and **Boston Children's Hospital** and the world's top universities, the Massachusetts Institute of Technology (MIT) and Harvard. At the intersection of academia and industry, Boston is also the location of many globally known research institutes among which includes Dana-Farber, Koch Institute, Wyss Institute etc.

GREAT(ER)

THE BOSTON ECOSYSTEM: EXAMPLE



KENDALL SQUARE INNOVATION DISTRICT



INNOVATION CENTRE DENMARK

DANISH IDEAS. GLOBAL SOLUTIONS.



MINISTRY OF FOREIGN AFFAIRS
OF DENMARK



Ministry of Higher
Education and Science
Denmark

CONTACT

Ann-Christina Petersen Lange
Executive Director & Consul
Innovation Centre Denmark Boston
anclan@um.dk

Patrick Risager Mikkelsen
Innovation Officer
Innovation Centre Denmark Boston
patmik@um.dk

Natasia Lundqvist
Commercial Advisor
Innovation Centre Denmark Boston
natlun@um.dk / +1 857 347-9068

City of Boston



City of Boston
LGBTQ+ *Advancement*



EQUITY & INCLUSION VALUE STATEMENT



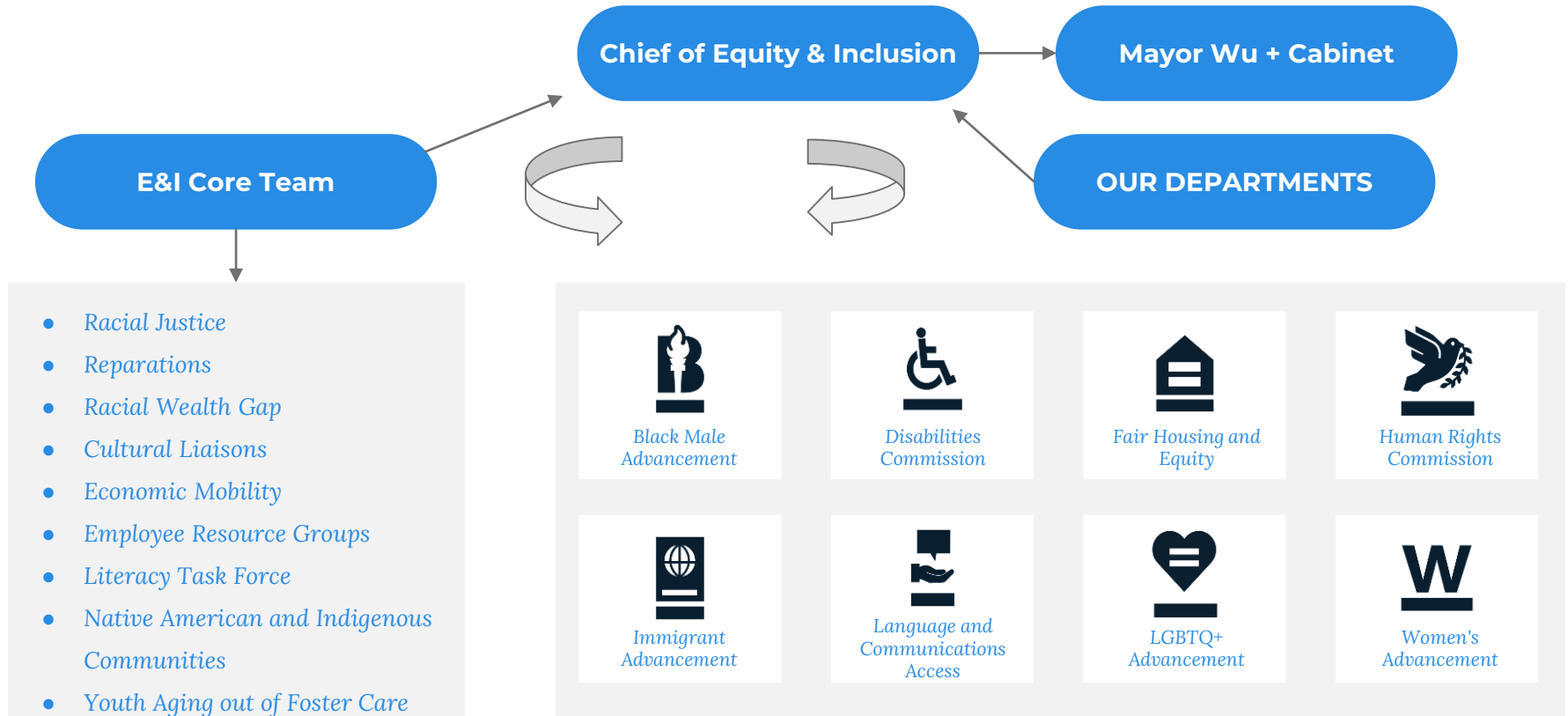
About us

The City of Boston has played a role in causing and perpetuating inequities in our society. We are building **a city for everyone** by improving social determinants of health in partnership with our colleagues and residents.

We define **equity and inclusion** as a set of actions taken to ensure that every resident, particularly those from historically excluded communities, has the resources it needs to stay and thrive in Boston - it is the active process of meeting individuals where they are and making resources accessible to all.



UNDERSTANDING THE CABINET AND THE DEPARTMENTS



LGBTQ+ ADVANCEMENT: TEAM



**Jullianne
Doherty Lee**
(she/they/them)

Executive Director



**Daunasia
Yancey**
(she/hers)

**Community Relations
Specialist**



Candace Nguyen
(she/hers)

**Community Relations
Specialist**



Jonathan Peñuela (He/his)
LGBTQ+ Policy Fellow



Adeline Huang (she/hers)
LGBTQ+ Youth Fellow

LGBTQ+ ADVANCEMENT: CONTEXTUALIZED

MISSION

We empower, protect, and promote the rights, dignity, and advancement of Boston's LGBTQ+ residents and our allies.

The Mayor's Office of LGBTQ+ Advancement develops policies, community-oriented programming and provides resources for the City's diverse LGBTQ+ community.

VALUES

Doing big things by getting the small things right.

Getting City Hall out of City Hall and into our neighborhoods.

Embracing the possibility of Boston.

DEPT FUNCTION

Policies

Programs

Resources



We are...

- LGBTQ+ (Lesbian, Gay, Bisexual, Trans*, Queer, Questioning, Intersex, Asexual, Two Spirit, +)
- charged as public servants to serve ALL constituents equitably, intentionally, and joyfully
- to provide foundational knowledge of the issues facing LGBTQ+, nonbinary and transgender constituents and colleagues
- to best to support gender diverse individuals in all elements of life
- to celebrate the diversity of our city
- to SLAY the possibilities of government



Where we are: LGBTQ+ Landscape

- Nationwide attacks on the rights, liberties, and very existence of LGBTQ+ individuals
- 45% of LGBTQ+ youth considered attempting suicide last year.*
- LGBTQ+ individuals are at greater risk of homelessness, anxiety and depression.*
- QPOC face a disproportionate impact across the board (housing, health, discrimination)*
- Whereas other parts of the country take action to criminalize LGBTQ+ individuals, Boston is leading the charge to protect, elevate and celebrate our vibrant, diverse LGBTQ+ community.

*Nationwide



LGBTQ+ Public Health

- **Monkeypox Community Impact - MOLA Led the City's Strategic LGBTQ+ Community Outreach**
 - In partnership with the Boston Public Health Commission, MOLA led Boston's M-pox outreach to LGBTQ+ communities most at risk.
 - MOLA hosted a community Town Hall focused on black and brown LGBTQ+ communities to update the community on resources, fact sheets and inclusive vaccination outreach plan.
- **LGBTQ+ Substance Use and Narcan Trainings with BPHC**
 - MOLA received \$10,000 grant from United Healthcare to support this partnership
 - 5 sessions with 15-20 participants
 - Connecting with those most at risk for (and those in relationship and community with) overdose and substance abuse disorder
 - Provide community stabilization session
 - Movie nights/social events



LGBTQ+ Public Safety

- **LGBTQ+ Public Safety Community Impacts**
 - Due to an uptick of hate incidents around racism and LGBTQ+ communities, MOLA hosted 2 town hall events
 - MOLA provides support to those impacted by hate
 - LGBTQ Pryde - Support of LGBTQ+ Senior Housing, LGBTQ+ older adult boat ride
 - First Baptist Church - Support against the vandalism that happened at this church in JP
 - Community Town Hall Listening Session on LGBTQ+ Public Safety (with HRC)
 - Provided an open and safe space for all that identify as LGBTQ+ to speak to their experiences with hate incidents in Boston.
 - Boston Police Department now providing LGBTQ+ Public Safety community briefings.
 - Monthly LGBTQ+ Public Safety virtual meetings



LGBTQ+ Upward Economic Mobility

- **Beyond Pride Community Mini Grants (over \$150,000)**
 - MOLA provided 30 mini-grants totaling over \$150,000 to local LGBTQ+ led and serving grassroots organizations and individuals addressing real LGBTQ+ community needs and offering long-term benefits.
- **Expanding the City of Boston's Mayor's Office of Economic Opportunity and Inclusion**
 - Expanding the city's women and minority business certification program to include LGBTQ+ owned businesses.
- **Partnerships with LGBT Chamber of Commerce and The Boston Foundation**
 - Collaborate to develop resources for grassroots organizers and emerging leaders
 - Increase visibility of LGBTQ+ businesses



AmplifyGSA LGBTQ+ Youth Summit



Mayor's Office of LGBTQ+ Advancement

MOLA and LGBTQ+ Youth



- **AmplifyGSA:** The initiative is centered around promoting Gender and Sexualities Alliances in Boston schools. Develops relationships with schools across the city to learn what LGBTQ+ students need in order to feel more supported in their schools
- **MOLA partnered with the Boston Celtics:** to host a LGBTQ+ Youth Roundtable and invite community members to Celtics Pride Night
- **LGBTQ+ Youth Visits to City Hall:** Providing youth direct access to city government and conversations with city officials, leaders and Mayor Wu

Creating a Boston for ALL

- **Gender Affirming Identity Document Assistance & Transgender Emergency Assistance Program**
 - MOLA will be granting \$25k to a trusted local community organization to:
 - increase access to gender-affirming documentation
 - provide emergency assistance specifically to BIPOC transgender and non binary community members
- **Boston LGBTQ+ Community Coalition Building**
 - We have brought together groups across the city and region which hold events for Boston Pride month.
 - MOLA is proud to announce the formation of a monthly coalition virtual meeting
 - This will provide an opportunity for cross collaboration, communication and awareness, for the better delivery of services to LGBTQ+ residents.



Creating a Boston for ALL

- **Gender Inclusivity Ordinance**
 - A person's gender and sexual identity can be tremendously important to their overall identity, In partnership with the Department of Innovation and Technology, the City of Boston is now no longer requiring sex or gender identification on marriage licenses.
 - This change is the first the City has made based on new gender-aware guidelines for City resources and the collection of gender-identity data.
- **City of Boston's Historic LGBTQ+ Competency Training**
 - To increase awareness of LGBTQ+ Bostonians, and create better treatment and environments for LGBTQ+ residents and city employees with special focus on transgender, BIPOC and non-binary communities.
 - Adding a queer lens to City of Boston departments - pilot round will include forward facing departments



Why are pronouns important

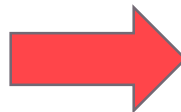
- Pronouns are crucial to respecting an individual.
- Everyone has pronouns that are used when referring to them and getting those pronouns right is not exclusively an LGBTQ+ issue.
- Pronouns are how we identify ourselves apart from our name and how someone refers to you in conversation.
- It's a simple way to affirm & validate identity.



Why This Matters

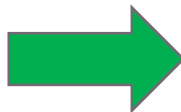
We can save lives

45% of
transgender
individuals will
attempt suicide



13x more likely
with
unsupportive
families

45% of
transgender
individuals will
attempt suicide



82% less likely
with support



Pride in Boston 2023



Pride in Boston is now centered the advancement and joy of LGBTQ+ residents, creates space for residents to build community, and elevates local organizations that serve and uplift Boston's diverse LGBTQ+ community.

Last year's celebration of National LGBTQ+ Pride Month will feature the unveiling of Portraits of Pride, a photography project that highlights LGBTQ+ leaders, which will remain on the Plaza for the entire month of June.

The Mayor's Office of LGBTQ+ Advancement is providing a pride guide that lists cost-free and public Pride events to be featured on boston.gov/pride.

Connect with LGBTQ+ Advancement:

In person: Boston City Hall (8th floor, Room 806)

Email: lgbtq@boston.gov

Online: boston.gov/lgbtq

Twitter: [@lgbtq_office](https://twitter.com/lgbtq_office)

Instagram: [@lgbtq_office](https://www.instagram.com/lgbtq_office)

THANK YOU!



City of Boston
LGBTQ+ Advancement

Harvard Digital Reskilling Lab



HARVARD | BUSINESS | SCHOOL

Reskilling Revolution?

Evidence from the Digital Reskilling Lab at HBS

10 October 2023
Raffaella Sadun
Jorge Tamayo

The Digital Data Design Institute at Harvard



Reinvent how companies will **compete** and **thrive** in the 21st century



Leveraged research model for Faculty



Upskill our alumni on the **changing world**



Educating the next generation of business leaders



DIGITAL, DATA AND DESIGN

D³

The Institute positions HBS **invent the future** of global business

Why Reskilling?

THE PROBLEM

Digital transformation changes the demand for skills:

- Polarization between high and low skill occupations
- Up to **32% of jobs** may be radically transformed (OECD 2019)
- **300mn jobs** estimated to be affected by Generative AI (Goldman Sachs, 2023)

New jobs created, but also many others at risk of obsolescence

POSSIBLE SOLUTIONS

Reskilling—training that helps acquire skills to access a new occupation—may help **workers** and **firms** cope with these changes:

- **1 billion people** may need to be reskilled to entirely new roles (WEF, 2021)

NEED FOR EVIDENCE

Despite public announcements, ongoing investments, reports, etc...

...Evidence on whether and how reskilling works is scant



*The **Digital Reskilling Lab** aims to develop new rigorous evidence and conceptual frameworks to support organizations that are already, or plan to, invest in **impactful** reskilling programs.*

*Our objective is to inform policy **at the firm, industry, and government levels** and facilitate the **adoption of effective practices** aimed at strengthening human capital initiatives in the workplace.*

Closing the **Knowledge** and **Implementation** Gap

Collect evidence on ongoing, large-scale programs

Compare and synthesize approaches across firms

Deep dives into possible sources of frictions

Evaluate the costs and benefits of reskilling programs

Evaluate the scalability of reskilling programs

Progress

Knowledge

Collect evidence on ongoing, large-scale reskilling programs

Interviews with CHROs and CLOs of global companies to measure “frontier” of reskilling (rationale, design and implementation)

Surveys across three countries (US, Germany, India) to measure distance from frontier

Compare and synthesize approaches across firms

HBR article *Reskilling in the Age of AI*

Roundtables with interview participants and research partners
- April 23, October 23

Academic articles:
- Clusters of practices
- Correlations with workforce’s outcomes

Deep dives into possible sources of frictions

Study of specific organizational bottlenecks limiting the impact of reskilling programs

- **Talent Hoarding** (managers)
- **Demand for reskilling** (workers)

Implementation

Evaluate the costs and benefits of reskilling programs

12 DUAs to explore feasibility of new projects

Of which:

- 2 ongoing evaluations using **administrative data**

- 2 ongoing partnerships to implement **Randomized controls trials (RCTs)**

Evaluate the scalability of reskilling programs

2 partnerships evaluating both pilot and scale-up of a reskilling program with global companies in automotive and retail



Today's objectives

PRESENT

Findings emerging from lab activities

- Reskilling needs a different strategic and organizational context to succeed (eg role of middle managers)
- Reskilling best practices still unevenly adopted across firms

Ongoing project in Italy: public private partnership centered on digital reskilling

LISTEN

Feedback

- Do the findings resonate with you?
- Are there other hidden challenges/shifts we should focus on?
- Are there other successful reskilling strategies we should study?
- Danish experience?

RECRUIT

Explore research opportunities

- Administrative data
- Experiments



Companies we talked to...



35 companies interviewed



11 industry represented



Company size ranging from **1,844** to **2,300,000** people

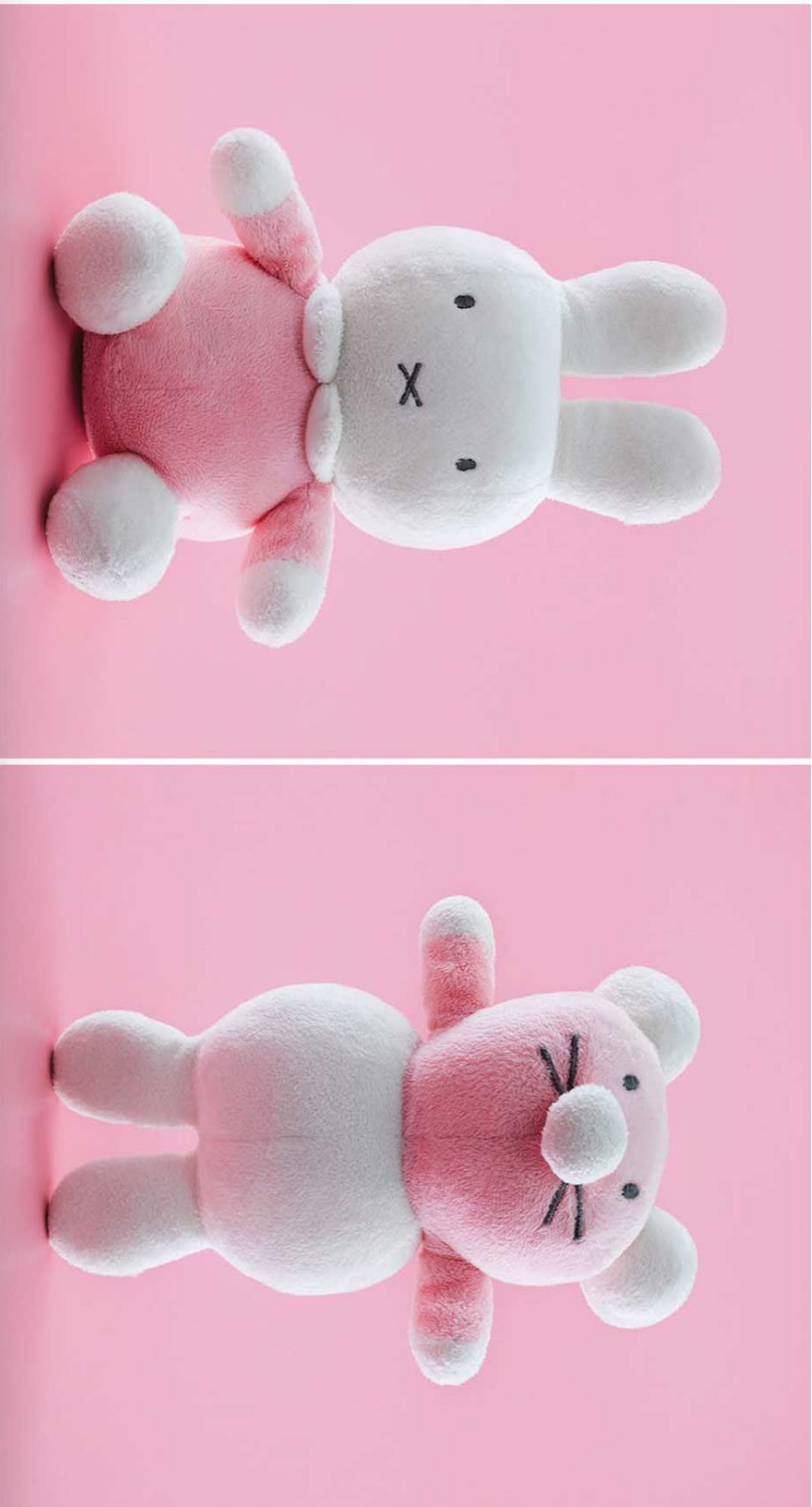


13 countries across **4** continents

Reskilling in the Age of AI

Five new paradigms for leaders—and employees by Jorge Tamayo, Leila Doumi, Sagar Goel, Orsolya Kovács-Ondrejkojovic, and Raffaella Sadun

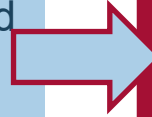
From the Magazine (September–October 2023)



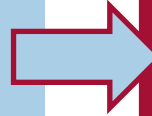
Interviews reveal 5 new Paradigms among “Frontier” Organizations

“OLD” PARADIGM

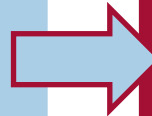
Reskilling is a CSR or PR initiative to support displaced workers



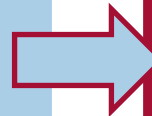
Reskilling is an HR responsibility



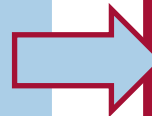
Reskilling is a training initiative



Employees need to be convinced to reskill



Reskilling is an individual firm problem



“NEW” PARADIGM

Reskilling is a key strategic initiative

Reskilling is every leader’s and manager’s responsibility

Reskilling is a change management initiative

Employees want to reskill – if the offer is good

Reskilling is best addressed as part of an ecosystem

But reskilling best-practices are still far from being widely adopted

RESEARCH QUESTIONS

Which firms engage in reskilling, and why?

How are reskilling programs structured relative to “standard” training (upskilling, general training)

How diffused are reskilling best practices emerging from the interviews?

APPROACH

A survey of 1200 C-suite HR leaders (CHROs, CLOs) of US based firms

- Additional sample of Business leaders for comparison

Information on:

- Skills needed
- Levers used to close skills gaps
- Rationale and structure of training programs

RESULTS AND IMPLICATIONS

Reskilling serves **specific needs**

- Breadth and severity of skills

Reskilling is **part of many levers** used by firms (eg outsourcing)

Reskilling programs are generally **more costly and complex** than standard training

Reskilling is managed differently than upskilling (eg more likely to include incentives for participation), **but firms are far from the frontier**

Deep dive in collaboration with three large organizations shows key role of middle managers for the adoption of training opportunities within firms

RESEARCH QUESTION

Interviews and surveys highlight key role of **middle managers** in training (selection and implementation of programs)

But middle managers may have an **incentive to hoard rather than promote talent** (Heagele, 2022), which may create friction

What is the role of middle managers in driving adoption of training programs?

APPROACH

Detailed personnel records from a large retailer, a fast food, and a car company (100,000 employees overall, 5 years of data, 3m observations)

Estimate **manager-specific “value added”** (differences in team performance systematically attributable to individuals) for a variety of performance and HR metrics, including **participation in training**

RESULTS AND IMPLICATIONS

Wide variation in training adoption **across managers within the same firm**

“Good” managers systematically train more: this generates a much higher likelihood of adjusting to technology shocks and driving performance

Firm need to **understand and leverage internal champions** to promote take-up of training opportunities among workers

But there are also other frictions that operate at the level of the worker, leading to less than optimal take up of training opportunities

RESEARCH QUESTION

Companies face difficulties in motivating workers to take part in upskilling and reskilling programs, even when programs benefit them (Stanton et al, 2022)

What motivates workers to take part in a reskilling program?

Possible frictions:

- Information
- Economic opportunities
- Self-identification with new jobs

APPROACH

Communication experiments to measure impact of *framing* on take up

- Same program presented to potential participants in different ways

Survey experiments to measure the demand for reskilling among unemployed workers, and the role that better information can play in shifting preferences

RESULTS AND IMPLICATIONS

Very little impact of framing

Self-identification in a new job as (if not more) important than expected wages in targeted occupation

- Differences across people
- Role of individual program features

Role for policy interventions

- Better screening of training programs
- Better communication of salient features (eg job finding rates)

OBJECTIVE

Fund and evaluate digital reskilling programs for 100,000 Italians in 5 years

- Unemployed/Inactive individuals
- Workers exposed to automation risks
- NEETs
- Women

GOVERNANCE

Steering Board

- Ministry of Finance
- Banking Philanthropic Foundations

Scientific Committee

- Headed by Raffaella Sadun, composed of 5 international experts

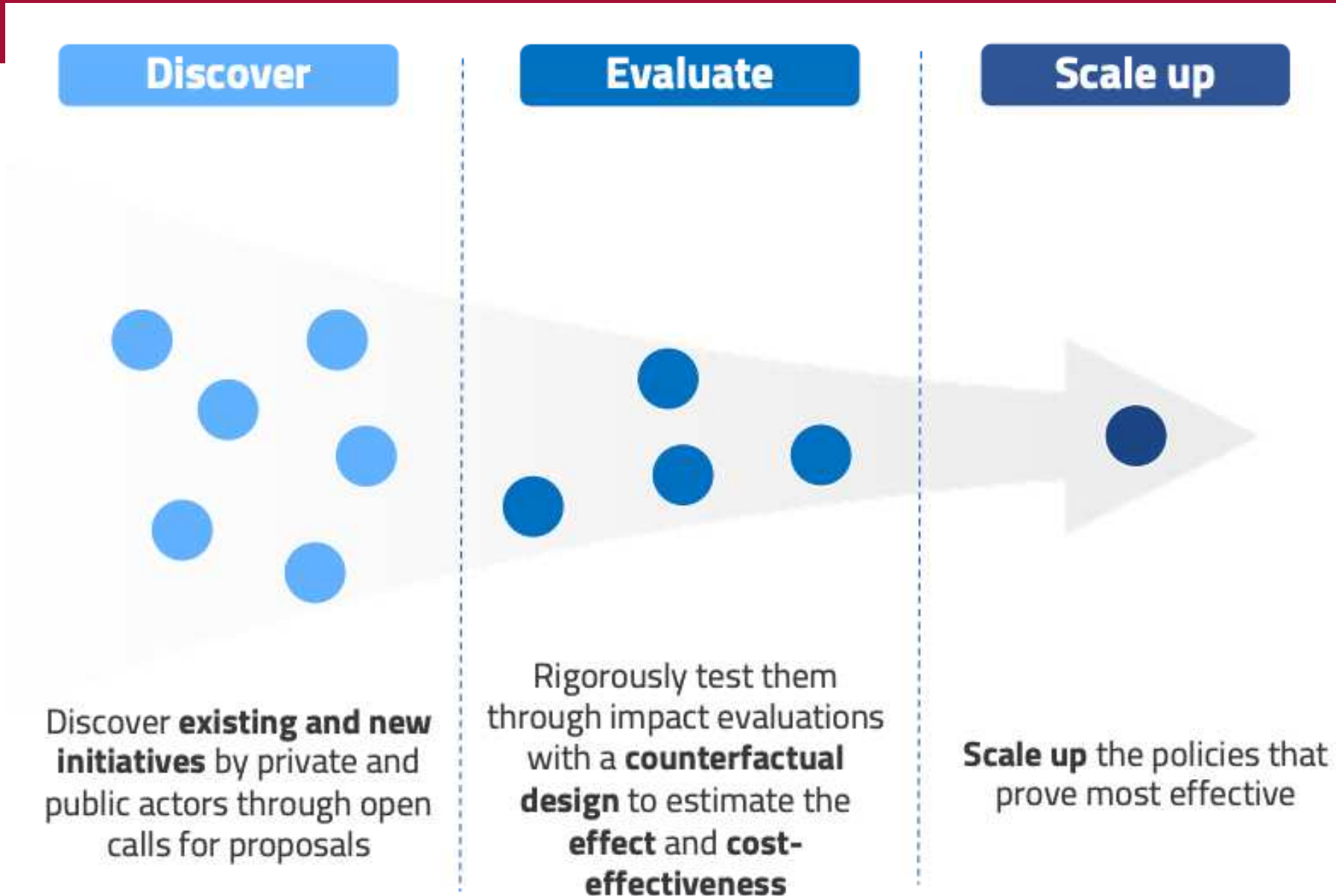
Together, they guide the work of the delivery partner, a **social purpose enterprise**

EVALUATION

The Fund takes on **three roles**

1. Funding of selected interventions through open calls (same objectives, same KPIs)
2. Evaluation of each intervention using a central function (Evaluation Lab); ex-ante agreement on homogenous approach (counterfactual approach) and link to pay for performance)
3. Scaling of successful projects

Public-Private Partnerships: Fondo Repubblica Digitale



Next Steps



Completion and dissemination of existing studies



Continue building a community of research oriented practitioners



Realize opportunities emerging from ongoing research partnerships & explore new opportunities



HARVARD BUSINESS SCHOOL

Thank you

Raffaella Sadun

rsadun@hbs.edu

[@raffasadun](https://www.instagram.com/raffasadun)

MIT Industrial Performance Center



'Big Fish Automation': Scaling New Technologies That Improve Work

Ben Armstrong

October 13, 2023



'Big Fish Automation': Scaling New Technologies That Improve Work

Ben Armstrong

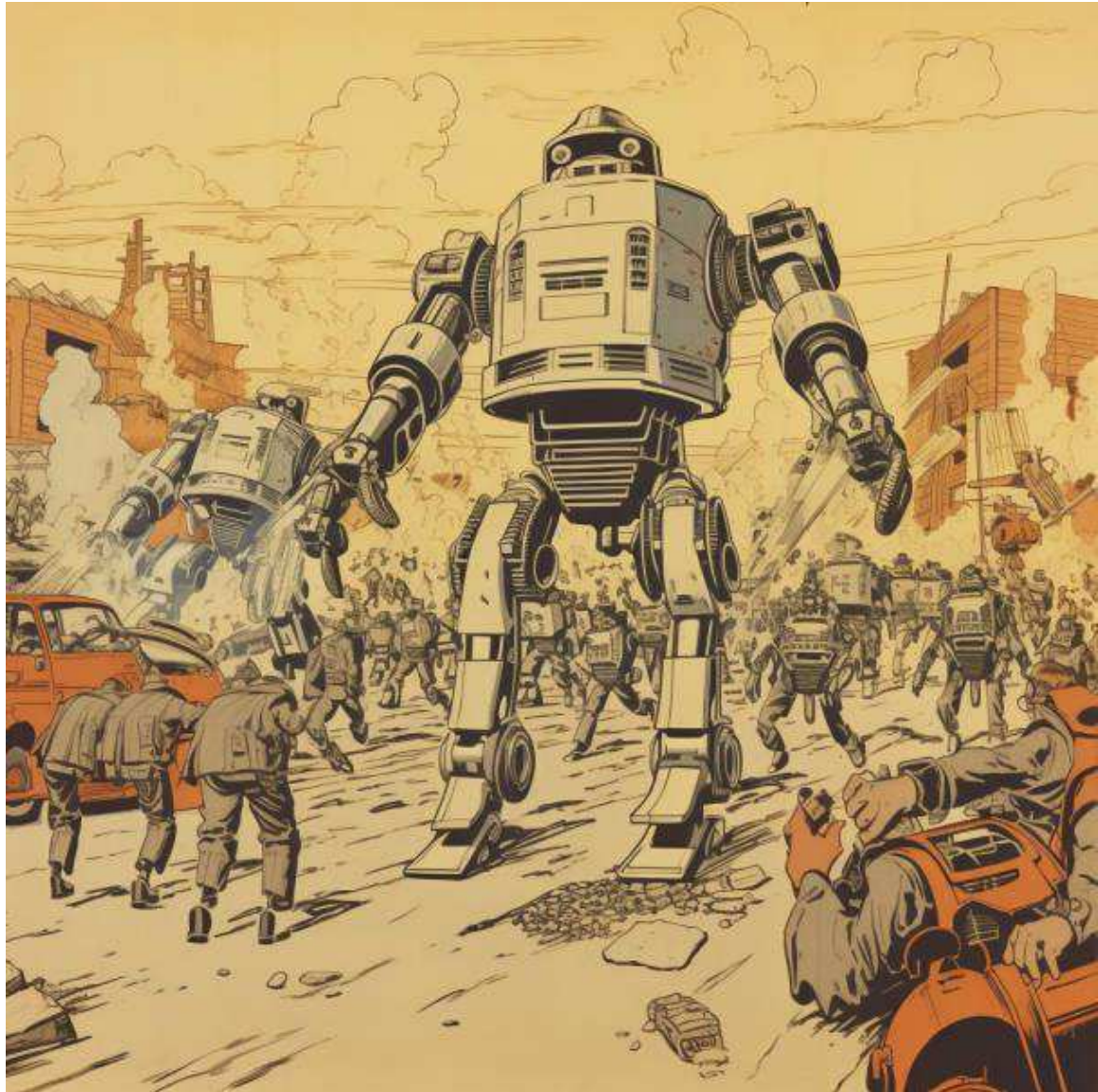
October 13, 2023

Outline:

- I. The AI difference
- II. Early evidence
- III. Known unknowns

Headlines

- 1. Is this time different?**
- 2. Is this an app or a system?**
- 3. How do we prepare our students?**



AUTOMATION AND TECHNOLOGICAL CHANGE

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ECONOMIC STABILIZATION

OF THE

JOINT COMMITTEE ON THE ECONOMIC REPORT

CONGRESS OF THE UNITED STATES

EIGHTY-FOURTH CONGRESS

FIRST SESSION

PURSUANT TO

SEC. 5 (a) OF PUBLIC LAW 304

79TH CONGRESS

OCTOBER 14, 15, 17, 18, 24, 25, 26, 27, AND 28, 1955

Printed for the use of the Joint Committee on the Economic Report

Headlines

- 1. Is this time different?** Generative AI seems less skill biased in many professional domains (medicine, law) with software the exception
- 2. Is this an app or a system?** Candidates for most popular use cases and dominant designs are declaring themselves, but results unclear
- 3. How do we prepare our workforce?** Expertise – including training without generative AI assistance – is still valuable.

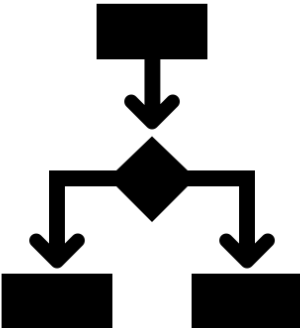
How is this time different?

PRODUCTIVITY



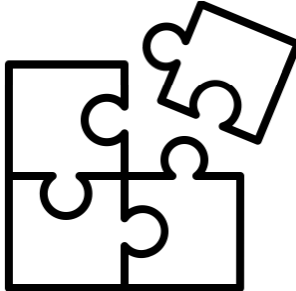
Suggested text response

DECISION SUPPORT



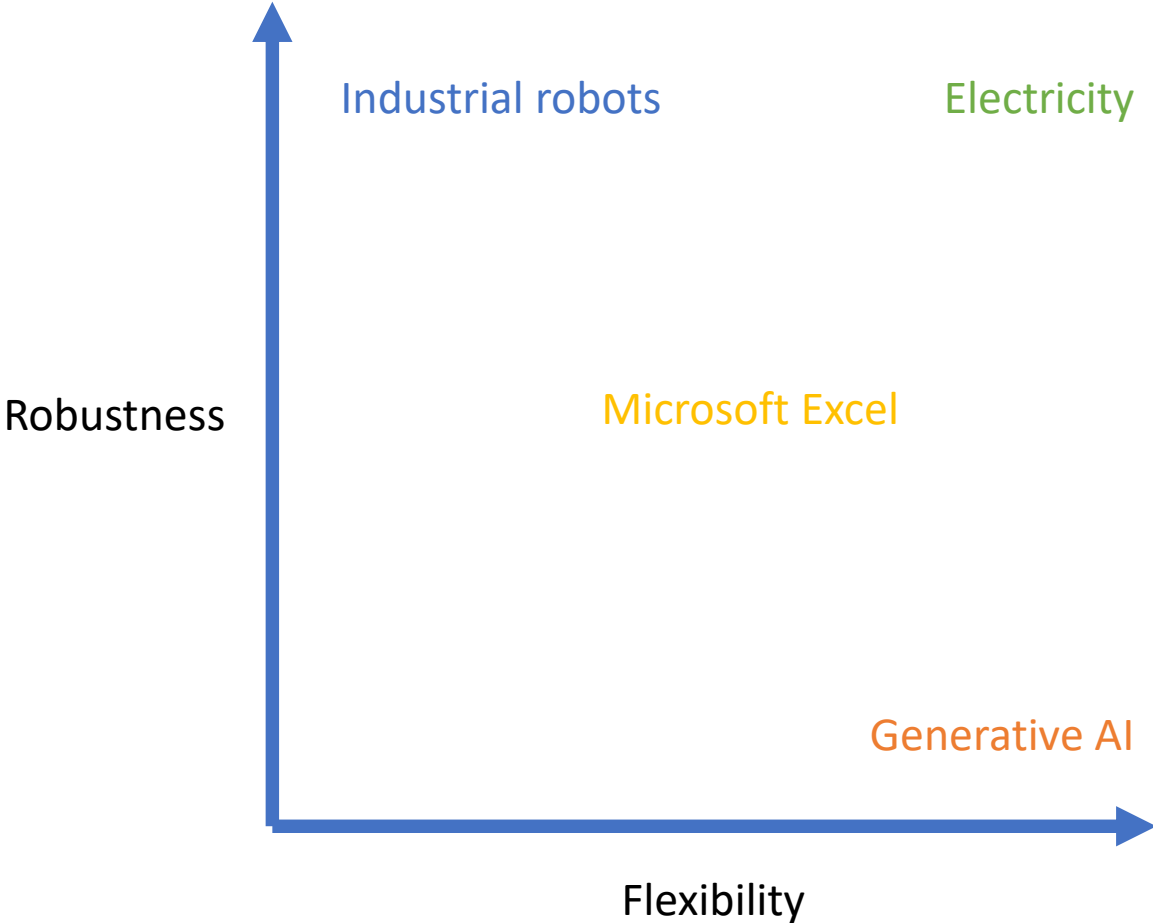
Summarizing maintenance guidelines and instructions

INNOVATION



Surfacing new proteins or product designs

How is this time different?



How is this time different?

1. Job displacement
2. Skill bias in reverse
3. Transformation to daily work

How is this time different?

1. Job displacement
 1. Productivity paradox
 2. Opportunity hoarding
2. Skill bias in reverse
3. Transformation to daily work

How is this time different?

Figure 1: Treatment Effects on Productivity

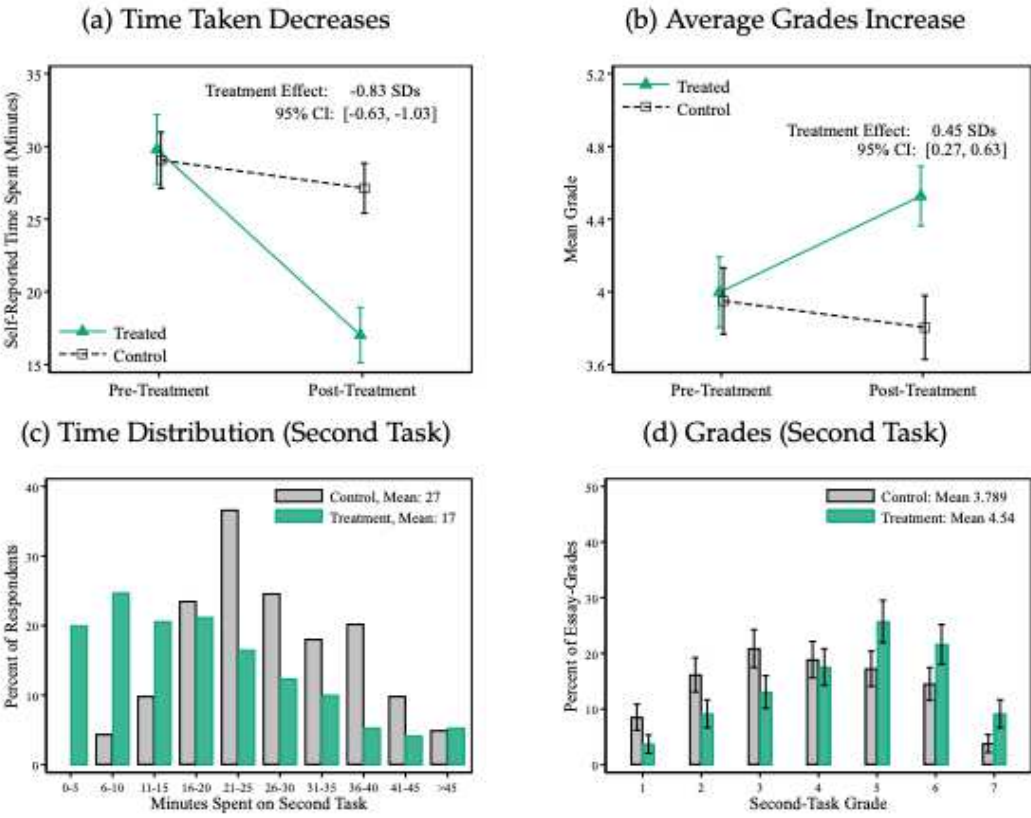
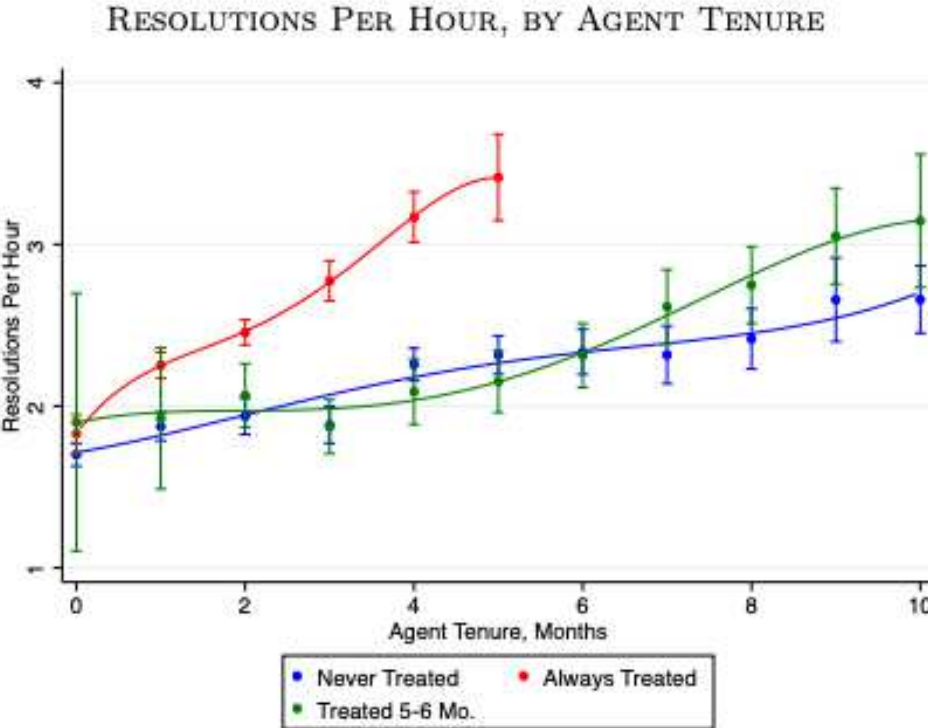


FIGURE 9: EXPERIENCE CURVES BY DEPLOYMENT COHORT

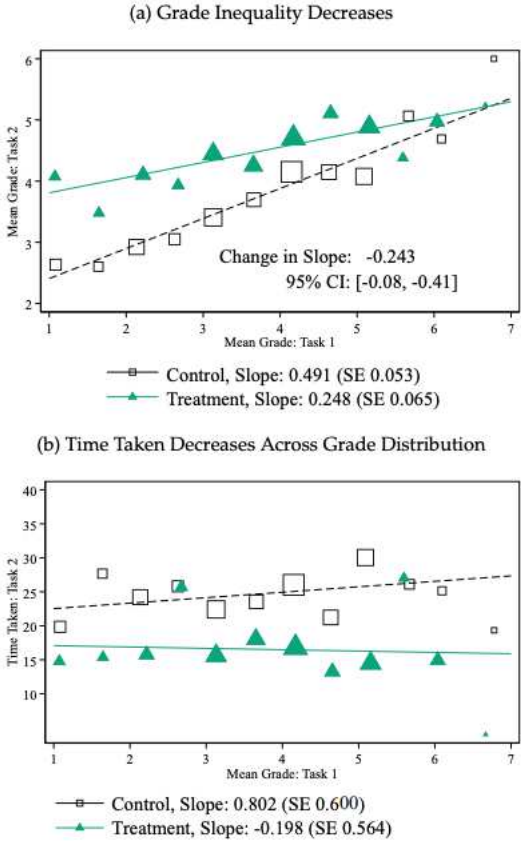


How is this time different?

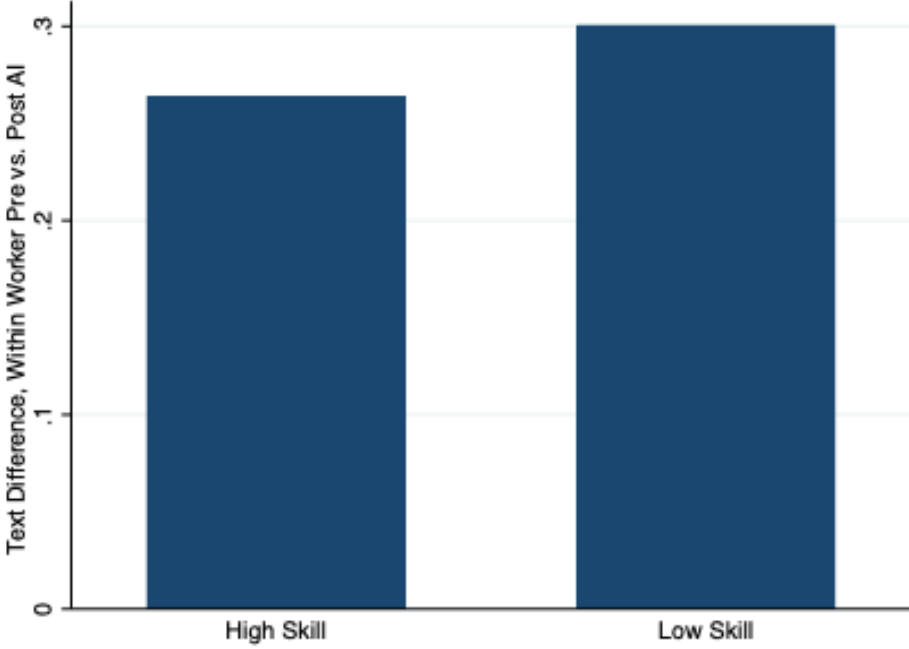
1. Job displacement
2. Skill bias in reverse
 1. Difference for low performers
 2. Skill bias and incumbent bias still exists
3. Transformation to daily work

How is this time different?

Figure 2: Effects on Grades and Time Across the Initial Grade Distribution



A. WITHIN-PERSON TEXTUAL CHANGE, PRE AND POST AI MODEL DEPLOYMENT



How is this time different?

Figure 1: Introduction to American Law Multiple Choice – Mean Performance

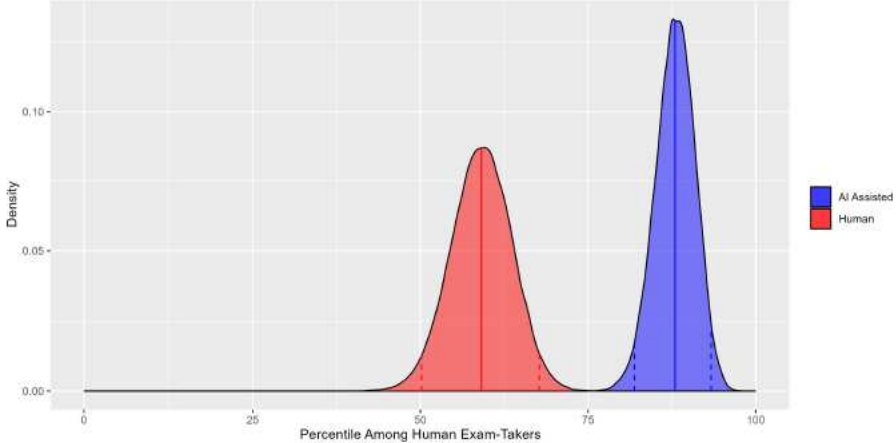


Figure 2: Introduction to American Law Essay – Mean Performance

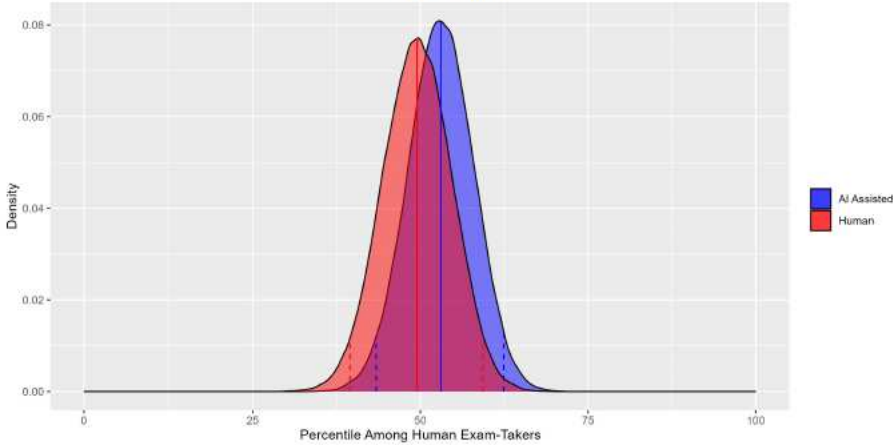
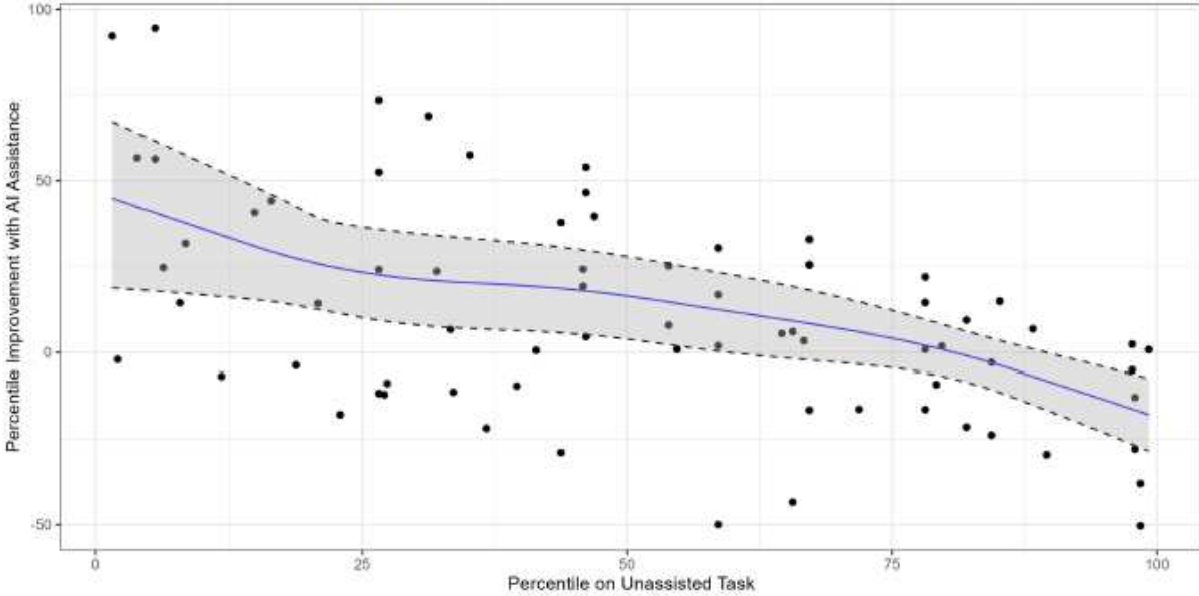


Figure 4: All Exams – Performance Improvement with Access to AI Relative to Baseline Performance



How is this time different?

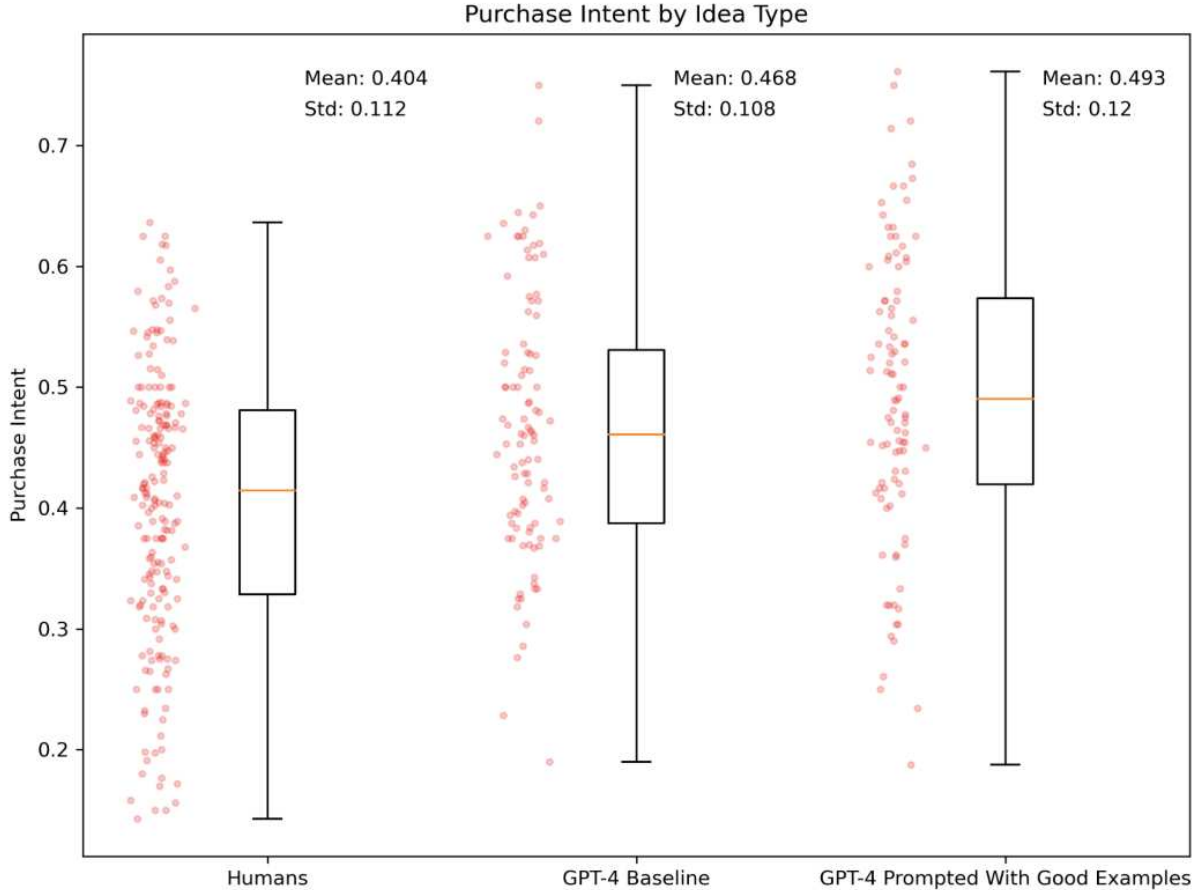


Researchers pitted Wharton students against ChatGPT and a version of ChatGPT trained with examples to see which came up with better product ideas.
DAN PAGE

TECHNOLOGY | ARTIFICIAL INTELLIGENCE

M.B.A. Students vs. ChatGPT: Who Comes Up With More Innovative Ideas?

We put humans and AI to the test. The results weren't even close.



How is this time different?

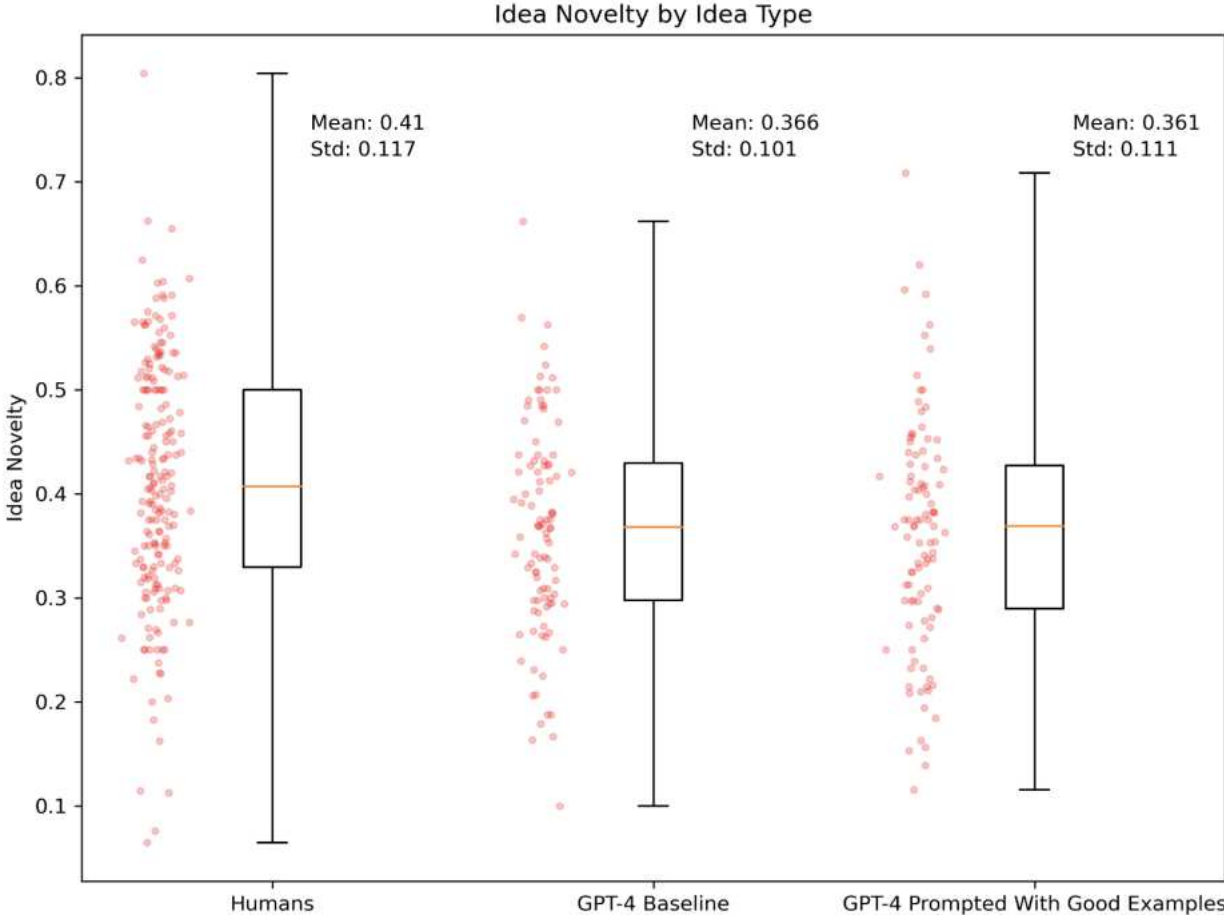


Researchers pitted Wharton students against ChatGPT and a version of ChatGPT trained with examples to see which came up with better product ideas.
DAN PAGE

TECHNOLOGY | ARTIFICIAL INTELLIGENCE

M.B.A. Students vs. ChatGPT: Who Comes Up With More Innovative Ideas?

We put humans and AI to the test. The results weren't even close.



How is this time different?



Researchers pitted Wharton students against ChatGPT and a version of ChatGPT trained with examples to see which came up with better product ideas.
DAN PAGE

TECHNOLOGY | ARTIFICIAL INTELLIGENCE

M.B.A. Students vs. ChatGPT: Who Comes Up With More Innovative Ideas?

We put humans and AI to the test. The results weren't even close.

Table A1 Top 10% Ideas (By Purchase Intent)

Title	Source	Purchase Intent	Novelty
Compact Printer	GPT-4 (Examples)	0.76	0.55
Solar-Powered Gadget Charger	GPT-4 (Examples)	0.75	0.44
QuickClean Mini Vacuum	GPT-4 (Base)	0.75	0.30
Noise-Canceling Headphones	GPT-4 (Examples)	0.72	0.18
StudyErgo Seat Cushion	GPT-4 (Base)	0.72	0.39
Multifunctional Desk Organizer	GPT-4 (Examples)	0.71	0.21
Reusable Silicone Food Storage Bags	GPT-4 (Examples)	0.68	0.34
Portable Closet Organizer	GPT-4 (Examples)	0.67	0.23
Dorm Room Chef [oven, microwave and toaster]*	GPT-4 (Examples)	0.67	0.71
Collegiate Cookware	GPT-4 (Examples)	0.67	0.45
Collapsible Laundry Basket	GPT-4 (Examples)	0.65	0.21
On-the-Go Charging Pouch	GPT-4 (Examples)	0.65	0.33
GreenEats Reusable Containers	GPT-4 (Base)	0.65	0.21
HydrationStation [bottle with filter]*	GPT-4 (Base)	0.64	0.19
Reusable Shopping Bag Set	GPT-4 (Examples)	0.64	0.19
CollegeLife Collapsible Laundry Hamper	GPT-4 (Base)	0.64	0.26
Adaptiflex [cord extension to fit big adapters] *	Student	0.64	0.44
SpaceSaver Hangers	GPT-4 (Base)	0.64	0.33
Dorm Room Air Purifier	GPT-4 (Examples)	0.63	0.29
Smart Power Strip	GPT-4 (Examples)	0.63	0.22
CampusCharger Pro	GPT-4 (Base)	0.63	0.31
Kitchen Safe Gloves	Student	0.62	0.31
Nightstand Nook [charging, cup holder]*	GPT-4 (Examples)	0.62	0.43

How is this time different?

1. Job displacement
2. Skill bias in reverse
3. Transformation to daily work
 1. Pace of enterprise adoption likely slow
 2. Depends on dominant design

How is this time different?

Figure 3: Effects on Task Structure and Skill Demand

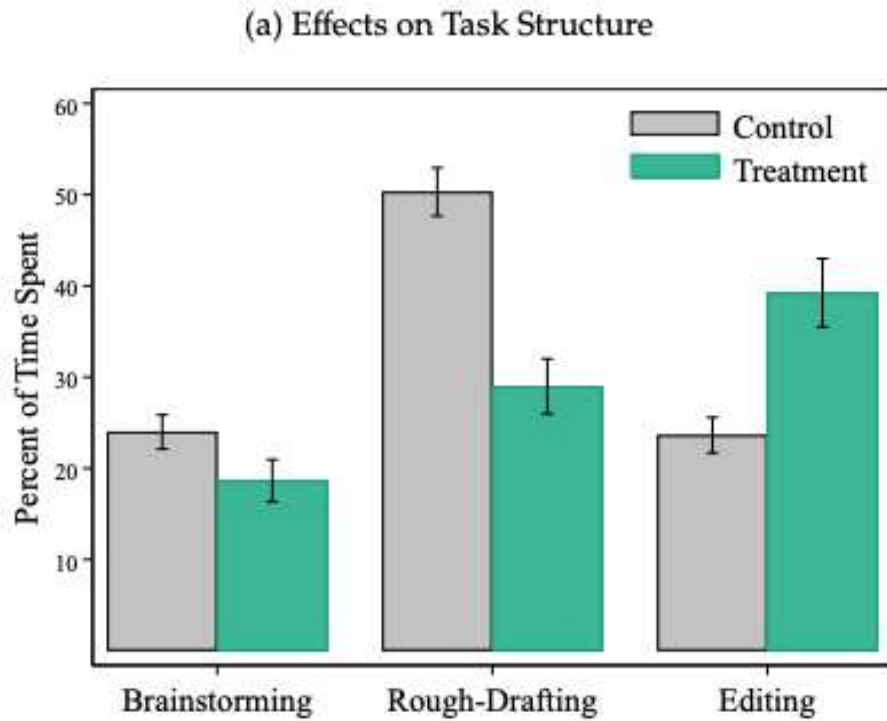
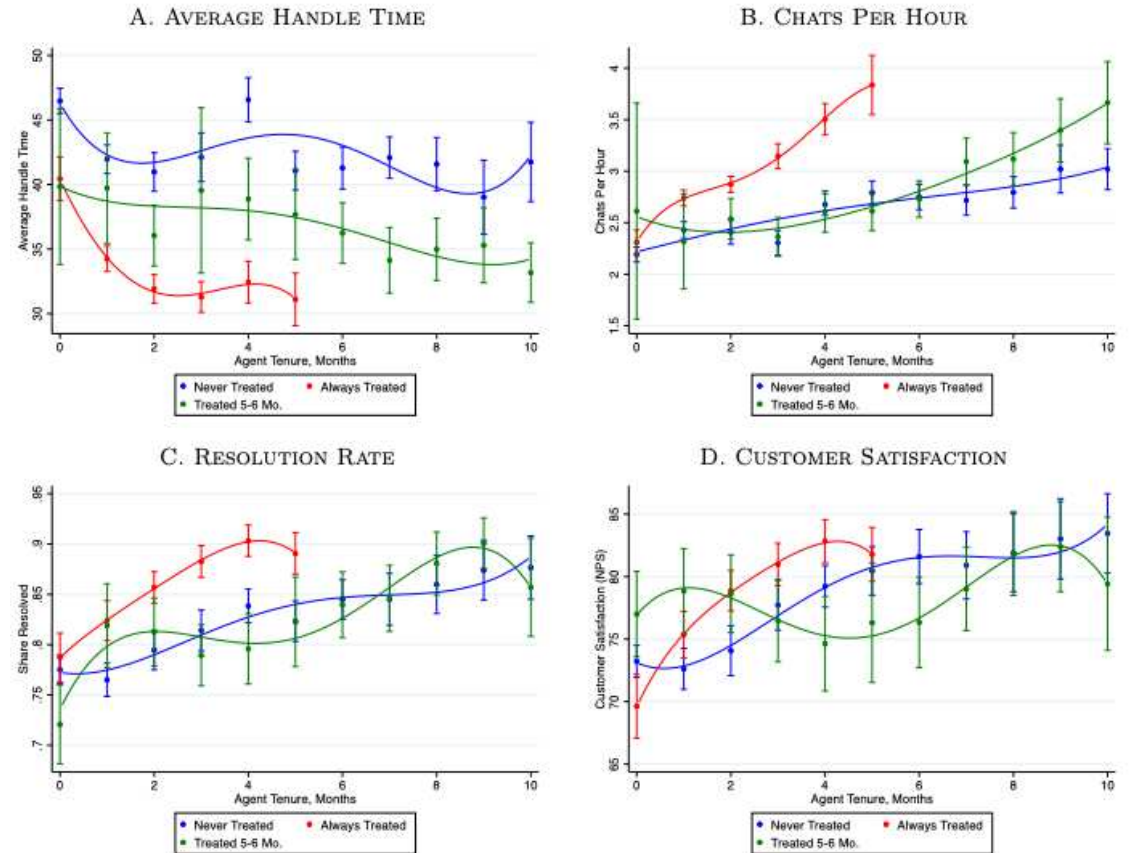


FIGURE A.5: EXPERIENCE CURVES BY DEPLOYMENT COHORT, ADDITIONAL OUTCOMES



How is this time different?

Figure 5: Bottom-Half Skills and Top-Half Skills - Inside the Frontier

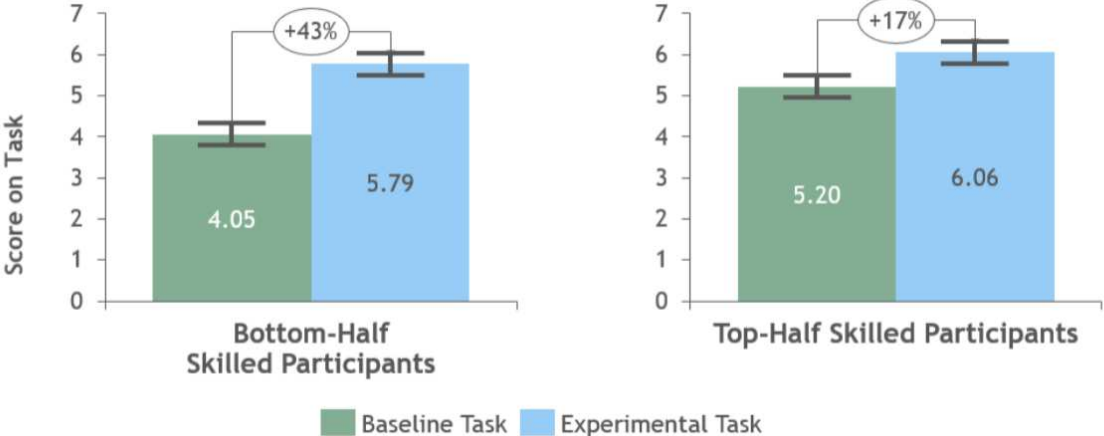
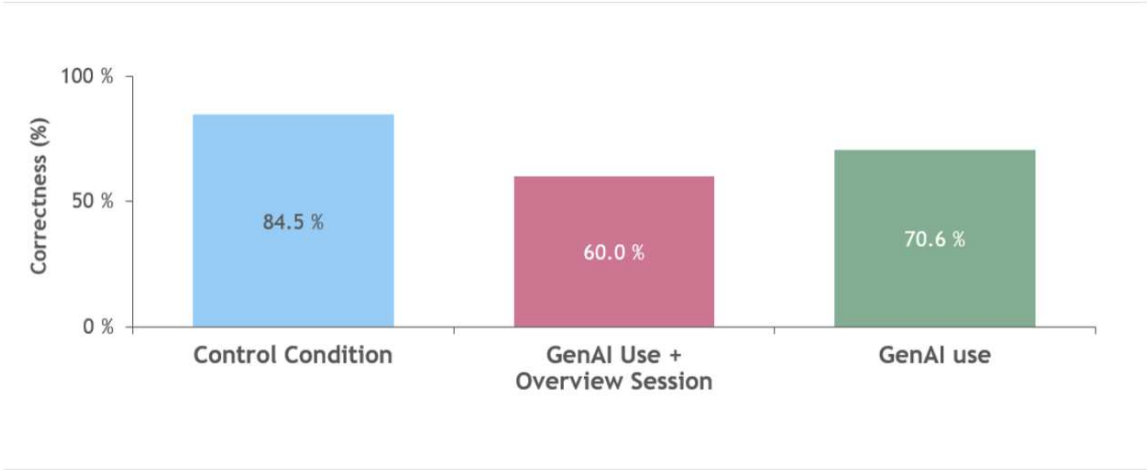


Figure 7: Performance - Outside the Frontier



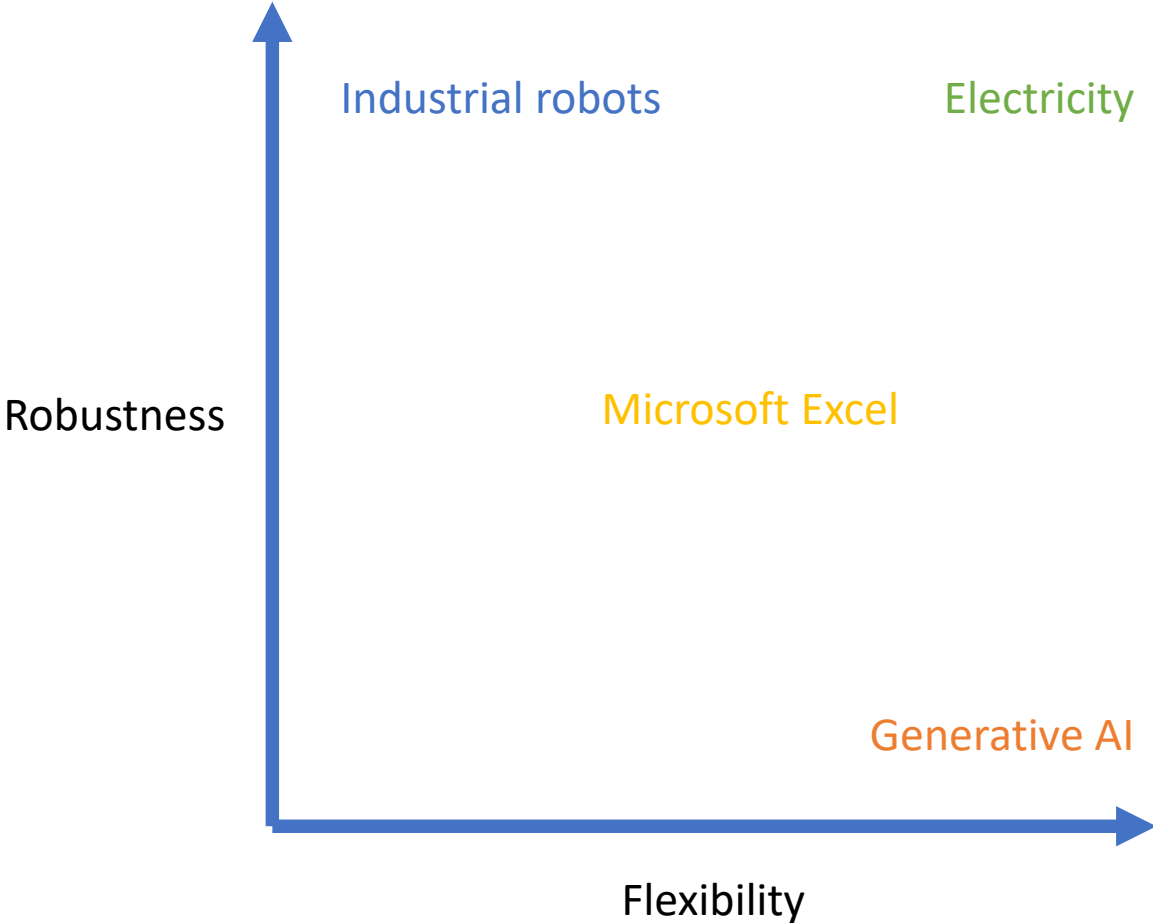
Notes: This figure displays average performance for the task outside the frontier. It reports the percentage of subjects in each experimental group providing a correct response in the experimental task.

Multiple Possible Futures

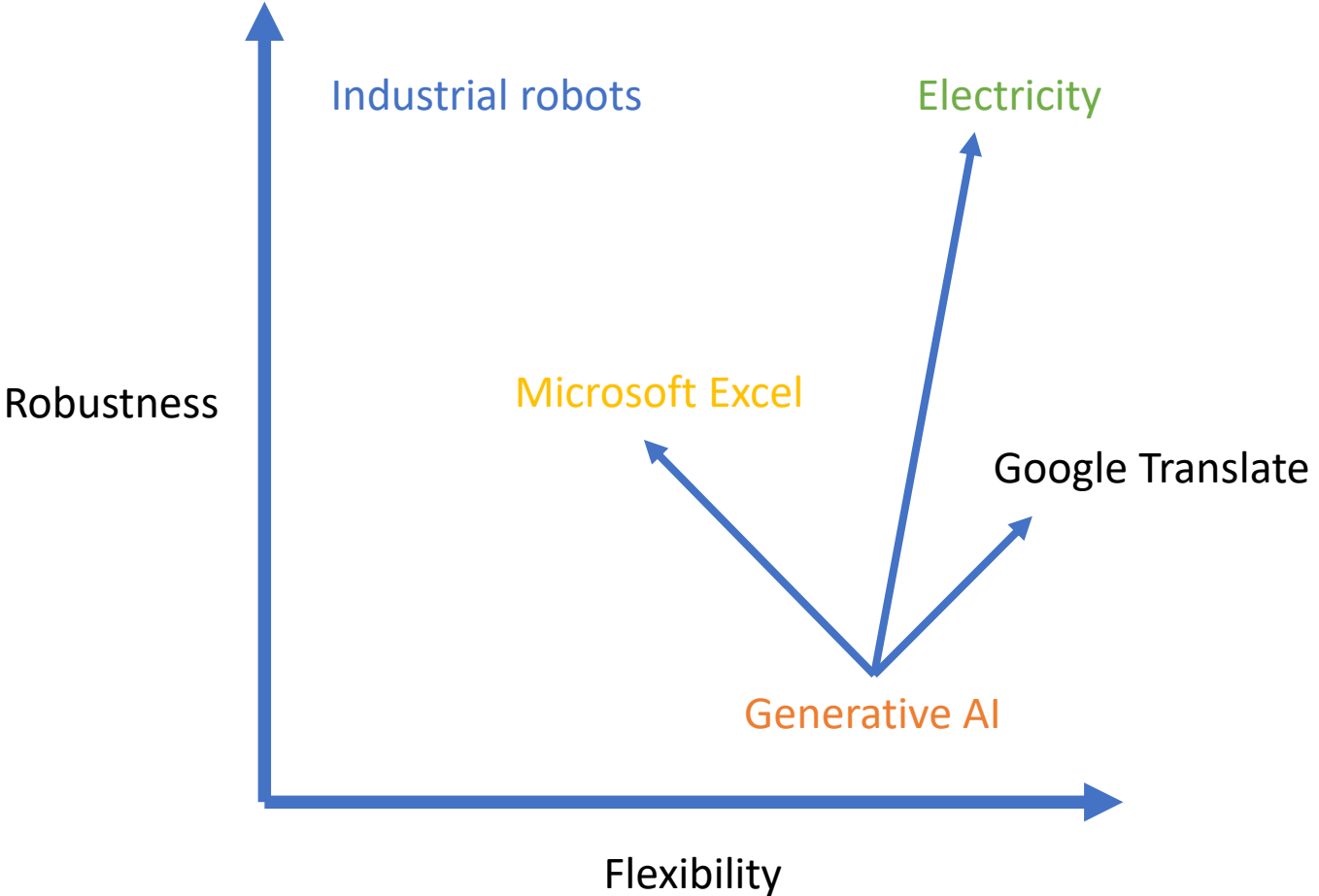


© EnergySage

How is this time different?



How is this time different?



Multiple Possible Futures



© EnergySage

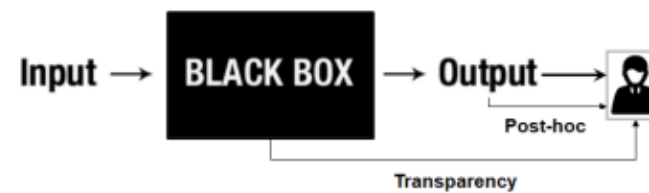
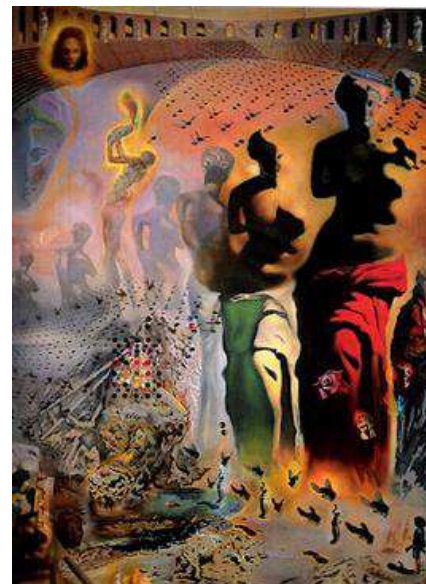


Fig. 4. Two categories of Explainable AI work: transparency design and post-hoc explanation.

Massachusetts Technology Collaborative

Mass Tech Collaborative Overview: Fast Facts

www.MassTech.org

- Established in 1982 by state law – Chapter 40J of M.G.L.
- Comprised of five Divisions all of which are established in state law.
- For FY23, Mass Tech is forecasted to deploy approximately \$75 million in grants.
- Governed by a Board of Directors chaired by the Commonwealth’s Secretary of Housing and Economic Development.
- Headquartered on a 36-acre owned campus in Westborough with an office in Boston.
- 59 employees.



MASSACHUSETTS TECHNOLOGY COLLABORATIVE

OUR MISSION:

We strengthen the competitiveness of the tech and innovation economy by driving strategic investments, partnerships, and insights that harness the talent of Massachusetts.

MBI

MASSACHUSETTS
BROADBAND INSTITUTE

Mission: To partner with municipalities and service providers to close the digital divide in targeted areas of the Commonwealth.



Mission: To support the cybersecurity ecosystem, compete as the national cybersecurity leader, and strengthen the resiliency of the public and private sector.

MeHI

MASSACHUSETTS
eHEALTH INSTITUTE

Mission: To lead as the single best destination for digital health innovation with focus on accelerating innovation; health data transparency and access; and improving healthcare outcomes and costs.



THE INNOVATION INSTITUTE

Mission: To create conditions for growth in the innovation economy.

Com

MASSACHUSETTS CENTER for
ADVANCED MANUFACTURING

Mission: To foster the most complete, most connected, and fastest manufacturing ecosystem from innovation through production.



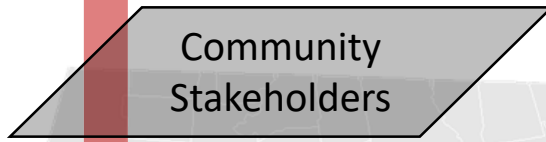
Established in 1982 by Statute

Ecosystem Engagement & Investment Model

Technologies

AI/ML Quantum Robotics Blockchain BlueTech FinTech Cybersecurity
 Advanced Mfg Digital Health Materials Comms Semicon. Additive Electrification

- Collaboratives
- NGOs
- Other



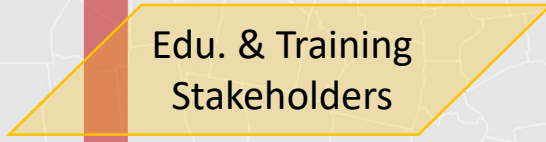
- Startups
- Sml, Med, Lrg Corp.
- Trade Associations
- Accel's & Incub's



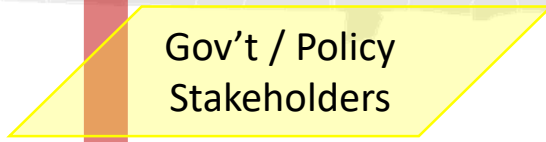
- Academic Institutions
- Research Labs
- MFG USA Inst.



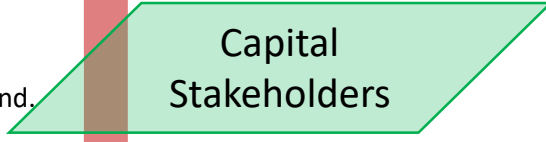
- K-12
- Vocational Tech
- Comm. College
- University



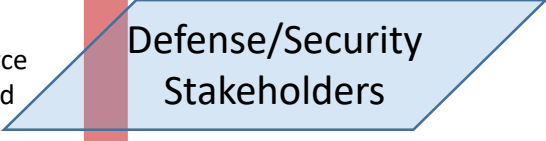
- Local Gov.
- State Gov.
- Federal Gov.



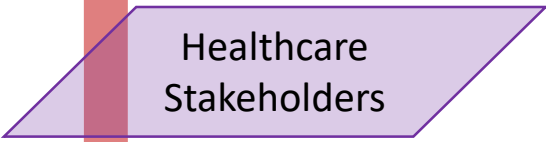
- Angel Investors
- Venture Capital
- Non-profits/Found.



- Army, Navy, Air Force, Space Force
- DHS, Coast Guard



- Payors
- Providers
- Patients



Ecosystem(s)

Needs, Capabilities, and Capacities



[R&D](#)



[T&I](#)



[M2I2](#)
[DH Sandbox](#)



[MMAP](#)
[hiWAY](#)



[Adv. MFG Tr](#)
[Cyber CCEs](#)



[MassBridge](#)



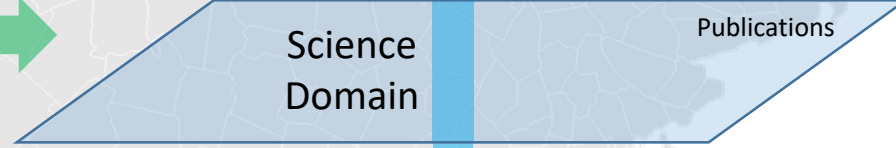
[Intern Partnership](#)
[Cyber Mentor](#)



[STEM Council](#)

Talent Pipeline

Cybersecurity Entrepreneurship Robotics DE&I Digital Literacy
 Advanced Mfg Digital Health Digital Eng. Caregiving Ageing



TRL 1

TRL 9

K-12

Reskill / Upskill

VocTech / CC / University



Commercial, Health, Public, & Defense Market Needs



The Center for Advanced Manufacturing (CAM)

Supporting the national resurgence to re-build manufacturing in the U.S. here in Massachusetts

Purpose

We foster a complete, collaborative and agile manufacturing ecosystem to enable business growth from innovation through production.



Christine Nolan
Director, Center for Advanced
Manufacturing

- WPI grad, Mechanical Engineer
- 10+ years in manufacturing
- Shift to economic and community development to help scale tech and manufacturing in Massachusetts
- Champion of 7000+ manufacturers across the Commonwealth helping them to compete and navigate a path to success.

Core Functions



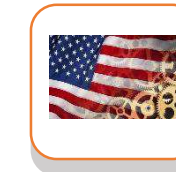
Convening and connecting with manufacturing stakeholders

CAM works in collaboration with the Advanced Manufacturing Collaborative (AMC), chaired by the Secretary of Housing and Economic Development (statute), to help shape the vision for scaling manufacturing in MA. We also host the annual Manufacturing Mash Up!



Strategic investments to fuel innovation and supply chain resiliency

From our smallest manufactures to our large OEMs across industries, we offer programs including **M2I2** focused on the commercialization of next generation technologies and our **MMAP** program which helps small to medium manufacturers with capital expenditures to modernize their operations making them resilient and ready for today's manufacturing technologies and challenges.



Federal priorities and Department of Defense partnerships

CAM partners frequently with the DoD, DoD Manufacturing Technology (ManTech), and other federal initiatives for federal grant opportunities, alignment with federal priorities outlined by the Manufacturing USA Institutes, and new initiatives such as CHIPS to help re-shore and develop new semiconductor technologies.



Talent pipeline

We work very closely with our high schools through universities for workforce training needs. We also work closely with our MassHire workforce training boards for manufacturing training for under-served, veterans, and the under- and un-employed.

Mass Cyber Center

*The Center focuses its activities on balancing the core principles of cybersecurity: **People, Process, and Technology.***

Purpose

The MassCyberCenter strives to enhance opportunities for our [cybersecurity ecosystem](#) to compete as the national cybersecurity leader and to strengthen the [resiliency](#) of our public and private communities.



Stephanie Helm
Director, MassCyberCenter

- Career Naval Officer Captain, USN, Ret.
- Cryptologic operations including space operations and fleet support
- Commanding Officer, Naval Security Group Activity, Norfolk
- Staff duty assignments at National Security Agency, Navy Staff, Central Command and Second Fleet

Core Functions



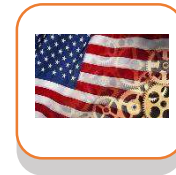
Strengthening Cyber Resiliency Across Massachusetts

Convene public and private sector leaders monthly to help Commonwealth municipalities and critical institutions protect data, increase cybersecurity awareness, and respond to emerging threats.



Resources to Support Cybersecurity Training and Protection

Providing resources to strengthen cybersecurity including an initiative to establish statewide network of Cyber Ranges and Security Operations Centers (SOCs) through a non-profit entity known as CyberTrust Massachusetts. This will address cyber resiliency for local governments, non-profits and small businesses while diversifying and expanding the cybersecurity talent pipeline.



Convening Cybersecurity Stakeholders and Ecosystem

The Massachusetts cybersecurity ecosystem offers an unparalleled concentration of top cyber firms, workforce, R&D centers, and universities; global leaders in healthcare, financial services, defense, manufacturing, life sciences; and informed and engaged public sector leaders that are driving cybersecurity policy and programs.



Talent pipeline

The MassCyberCenter created the Cybersecurity Mentorship Program to provide opportunities for diverse Massachusetts undergraduate college students to learn about careers in cybersecurity and develop their professional networks through direct engagement with industry professionals.

Massachusetts eHealth Institute

MeHI is the designated state agency for growing the digital health ecosystem in Massachusetts

Purpose

We catalyze healthcare innovation, technology, and competitiveness, and accelerate the adoption and utilization of health technologies across provider settings to improve the safety, quality and efficiency of healthcare in Massachusetts.



Keely Benson

Director, Massachusetts eHealth Institute

- Over 15 years experience in addressing the technology and innovation needs of healthcare organizations in a variety of roles that include promotion of health technologies in healthcare settings to coordinate patient care, health IT and interoperability projects, supporting EHR implementations for organizations providing aging and mental health services, and public health modernization efforts
- Track record of building relationships with stakeholders in the digital health and healthcare ecosystems

Core Functions



Support Innovations in Digital Health

Massachusetts is home to a variety of cutting-edge research and development facilities, or ‘sandboxes.’ These organizations provide a wide range of services supporting the lifecycle of validation and testing for digital health companies. The Sandbox Program is designed to both support digital health companies in their product development and expand the user base for sandbox environments.



Trusted partner to Executive Office of Health and Human Services

Under contract with HHS, MeHI provides subject matter expertise, policy guidance, project management and operational support for EOHHS to successfully implement technologies designed to improve the quality of healthcare delivery, increase coordination among providers, and modernize public health data efforts. This includes leveraging EHR data to make sure the right data is shared with the right person at the right time to support interoperability.



Supporting Employers and Innovations in Caregiving

More than 1 in 8 Americans act as unpaid caregiver for someone aged 50 or older. In 2015, there were 844,000 reported informal caregivers in Massachusetts out of a total population of 6.7 million. Informal caregivers cross all generations -- Millennials, Generation X, Baby Boomers -- and many are now part of the “sandwich generation” caring for a younger child and older adult at the same time.

As part of the [Mass Caregiver Initiative](#), MeHI promotes innovation and collaboration between digital health companies and aging and caregiving-focused provider organizations to address challenges related to the Commonwealth's growing aging population and those that care for them.

Massachusetts Broadband Institute

Mass Broadband Institute (MBI) is the leading state agency for broadband and digital equity efforts.

Purpose

MBI’s mission is to make affordable high-speed Internet available to all homes, businesses, schools, libraries, medical facilities, government offices, and other public places across the Commonwealth.



Michael Baldino

Director and General Counsel, Mass Broadband Institute

- Over 30 years of experience in the public sector
- More than a decade of experience in broadband strategy, policy and technology deployment
- Track record of managing complex grant programs over 25+ years , including the Waste-To-Energy Grant Program, which disbursed over \$55 million to 138 cities and towns
- Holds a B.A. SUNY Albany and a J.D. from Boston University School of Law

Core Functions



Broadband Infrastructure

MBI is in the final stage of completing the Last Mile Program that is expanding broadband access to 44 unserved and 9 partially served towns. Additional federal funding allows MBI to expand its reach to address gaps in broadband infrastructure in access and connectivity in pockets of unserved and underserved locations across the Commonwealth, and modeled on the Last Mile program.



Middle Mile Operation Responsibility

MBI continues to oversee the operation of the MassBroadband 123 middle mile network. MassBroadband 123 is an open access, fiber-optic middle mile network in western and north central Massachusetts. It consists of 1,200 miles of fiber, stretches across 120+ western and central Massachusetts communities and was the first step in bringing high-speed internet to all parts of the state. Direct connectivity to hundreds of public facilities in Berkshire, Franklin, Hampden and Hampshire Counties and parts of Worcester County are provided by the network.



Closing the Digital Divide

MBI is committed to closing the digital divide and ensuring digital equity for all residents. The COVID-19 pandemic has brought heightened attention to the importance of broadband access and adoption in almost every facet of daily life. Access to affordable broadband service is no longer considered a luxury, but an essential utility. The need for broadband in the 21st century is often compared to the need for electricity or phone service in previous centuries. Achieving digital equity in the Commonwealth is a critically important goal for our future prosperity. The lack of digital equity impacts our society in profound ways – hindering our citizens’ access to economic prosperity, health care, educational attainment, and civic and social engagement.

Key Program Areas – By Division



THE INNOVATION INSTITUTE

at the MassTech Collaborative

The Innovation Institute

Creating conditions for growth in the Massachusetts innovation economy

Purpose

The Innovation Institute employs a stakeholder led, cluster focused approach on behalf of the Commonwealth to strategically support dynamic responses to strengthen and grow the Massachusetts innovation economy.



Patrick Larkin

Deputy Director, Mass Tech
Program Executive
Director, Innovation Institute

Core Functions



Innovative stakeholder-led cluster development

The Innovation Institute convenes groups of industry, academic, nonprofit, and government leaders to collaboratively identify opportunities for growth in priority and emerging tech industry clusters.

Robotics

AI

FinTech

Blockchain

Quantum

BlueTech



Strategic investments to fuel R&D and ecosystem growth

The Innovation Institute facilitates connections among research institutions and leading technology firms through investments in R&D infrastructure as well as support of commercial ecosystem enhancement.



Entrepreneurial ecosystem building

The Innovation Institute provides critical mentorship, technical services and targeted investment to strengthen and grow entrepreneur support organizations.



Tech talent & diversity

The Innovation Institute funds internship and workforce development programs to support talent growth and retention in the technology economy as well as targeted investment in programs that promote greater diversity and inclusion in priority sectors.



Research & analysis of the innovation economy

The Innovation Institute provides objective and reliable data and analysis of trends and opportunities to support effective policy design and decision making.

Collaborative Research & Development Matching Grant Program

Facilitating connections between research institutions and leading technology firms through strategic investments in R&D infrastructure.

About

This program supports new research and development ideas among companies and other research institutions working in collaborative partnerships to advance new, tech-based innovations into the marketplace. The role of universities and other not-for-profit research organizations is central to the objectives of this program, which seeks to build on and expand collaboration amongst research institutions.

Applications are assessed on technical merit and economic impact potential of each individual application, as well as the timeline for demonstrable and measurable economic impact. An Investment Advisory Committee with members from academia, government and industry reviews applications with applicants and staff.

Guiding Principles

- Expansion of a key industry cluster(s)
- Spill-over impacts in markets
- Diversity, Equity & Inclusion impact
- Invests in TRL 3 (experimental proof of concept) to TRL 9 (actual system proven in operation)

Key Requirements

- Collaboration among two or more Partners
- Project must have a research component
- Industry engagement
- Statutory 1:1 match
- Funding limited to capital expenditures

Collaboration Across Stakeholders driving Research and Development, Tech and Innovation, Economic Growth, Start Up Access

Industry	Academia	Government (Our Role)
<p>Primary</p> 		
<p>Collaborators or Commercializing Products</p> 		<p>Collaborators</p> 

Representative not all inclusive.

Tech & Innovation Ecosystem Grant Program

The T&I Ecosystem Program represents a uniquely creative and comprehensive approach toward supporting growth within technology and innovation ecosystems across the Commonwealth.

About

The purpose of the program is to support projects that foster technology deployment, business, talent, capital or other ecosystem support that leads to **sustainable growth and improved competitiveness of firms doing business in priority technology and innovation sectors in Massachusetts.**

- ✓ Supporting targeted commercialization projects to more broad-based economic development projects.
- ✓ Investing in enhanced collaborations between ecosystem builders and industry to foster economic development.
- ✓ Providing opportunities for underrepresented communities in the technology sector.
- ✓ Strengthening Technology & Innovation across **12 priority sectors** beyond traditional Innovation Centers.

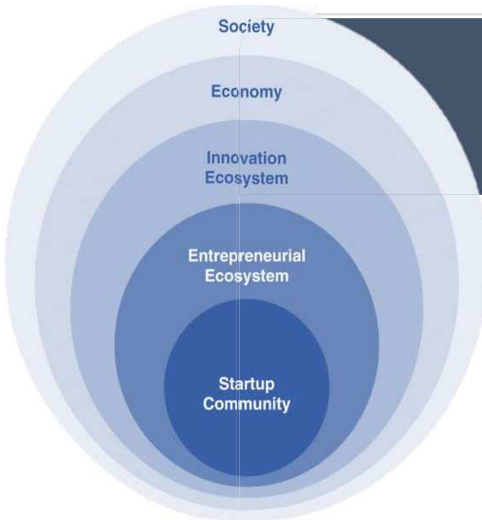
Use of Funds

- ✓ **Direct Economic Impacts with Industry Support & Collaboration**
- ✓ Real **Commercialization Focus**: Top of TRL and beyond (Prototyping or Production support for technologies beyond research center investments)
- ✓ Shared Technology systems and platforms (Technology Sandbox)
- ✓ Novel training platforms supporting talent pipelines
- ✓ Hardware Accelerators
- ✓ Virtual infrastructure for mentorship and business assistance support
- ✓ Funding limited to capital expenditures



Entrepreneur Mentorship Program

Building regional startup ecosystems and providing entrepreneurs with tools and mentorship needed to launch and scale companies in Massachusetts.



Strong startup communities are the heart of innovation economies.

The Mentorship Program drives the Commonwealth’s entrepreneur-led economic development efforts. The Innovation Institute’s mentorship grants and enable community-based incubators and accelerators to provide essential startup support that fuels entrepreneurial ecosystems and economic development in large cities and small towns across Massachusetts.

The accelerators and incubators that benefit from the Mentorship Fund provide young companies with high-growth potential access to mentorship, educational workshops, and potential seed funding to test their business models and refine their innovations.

Pathways to Scale

In July 2021, the Innovation Institute awarded \$750,722 to 5 grantees to execute mentorship programs designed to connect post-accelerator startups with experienced entrepreneurs to overcome the challenges of growing a company to scale. Programming is wrapping up and the impact of the program will be captured in an impact report in early 2023.



Strong Entrepreneur Ecosystems

In June 2022, the Innovation Institute awarded \$100,000 to 4 regionally-based entrepreneur support organizations to research the unique needs of entrepreneurs in their communities and draft a strategic plan. In 2023, these organizations received follow-on implementation awards 12-24 months to help local entrepreneurs succeed.

- Worcester
- North Central MA
- Northampton
- State-wide Network

MassTech Internship Program (MTIP)

Connecting students to career opportunities at emerging tech firms.

About

Support internships for Massachusetts college and graduate students at tech start-ups scaling across the Commonwealth, helping drive innovation and keeping our tech sector dynamic, vibrant, and growing across the Commonwealth. Annually the program provides approximately 150 internships.

- Since its launch in 2013, MTIP has distributed \$3 million supporting more than 1,000 summer interns at over 400 tech firms across Massachusetts.
- 1/3 of interns are retained by their employer at the end of the internship.
- 56% of 2022 participants identified as being from diverse backgrounds.



Use of Funds

How it works: Massachusetts tech firms w/250 or fewer employees eligible for two \$3,200 intern stipends with required 1:1 match.

Priority Sectors: Cybersecurity, Digital Health, FinTech, & Robotics. Companies in these sectors may have a third intern.

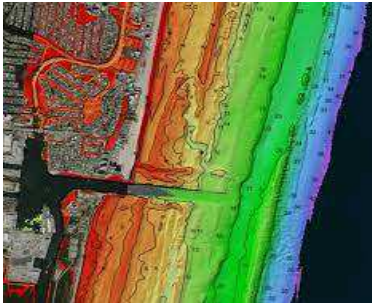
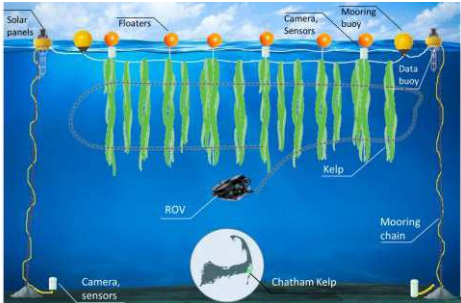
Marine Tech/Blue Tech

In addition, to supporting this cluster with MassTech investment vehicles, we support the Seaport Economic Council's Blue Tech initiatives as well (of which the Lt. Governor is Chair).

About

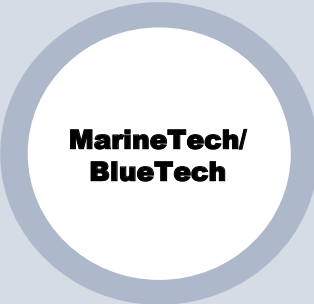
The global blue economy, including tourism, fisheries, marine renewable energy, and biotechnology, is predicted to **grow at double the rate of the rest of the economy by 2030**. Massachusetts has a **nation-leading ecosystem of maritime and undersea innovation**, with its unparalleled concentration of academia, industry, and government maritime expertise and infrastructure.

The Innovation Institute's Blue Economy & Marine Technology Initiative seeks to accomplish the following outcomes: Increase knowledge about the marine environment; Improved research/technology uptake by the market; Improved business model innovation; Increased diversity and inclusion in the Blue Economy workforce; and Increased investment in Blue Economy activities.



\$1.65 Million Invested in 8 projects

TUFTS – SeaSpectral; CCCFA – eMOLT; UMass Boston – BEACON; SeaAhead – BlueSwell; MA Lobsterman’s – LobsterNet; New Bedford Port Authority’s Marine Databank; Mass Maritime – Ocean Data Portal; CCCFA - eMOLT



Pipeline: Upcoming Investments

\$2.11 Million Requested
MITRE BlueNERVE
UMass Amherst Moorings & Anchors COE Development

Current Focus Areas

- ✓ Data Generation, Aggregation & Manipulation
- ✓ Artificial Intelligence/Autonomous Systems
- ✓ Technology Development & Entrepreneurial Support
- ✓ Network Development Efforts – Modernize & Connect traditional maritime sector to tech and innovation
- ✓ Technology Testing Environments
- ✓ Marine Robotics

Future Focus

- ✓ Autonomous Systems
- ✓ Off-Shore Wind
- ✓ SeaFloor Mapping
- ✓ Remote Sensing Technology
- ✓ Marine & Bathymetric LiDAR for Unmanned Systems
- ✓ Aquaculture Technology
- ✓ Mooring & Anchoring Systems Testing & Development

FinTech

Supporting a collaborative, cross-disciplinary, and diverse community of FinTech innovators

Engagement



FinTech is rapidly transforming the way financial services are being delivered and consumed globally and Massachusetts has been a key player in that transformation. The majority of activities in the FinTech cluster revolve around payments & insurance and these splice across various sectors from banking, education, health to food and beverage. The Commonwealth has roughly 360 FinTech firms, including Flywire, Circle, & Toast. An E&Y 2020 industry assessment highlights the necessary components for breeding the industry's continued growth here: nearly 500 capital providers focused on Fintech, 100+ academic institutions with entrepreneurs, FinTech & other tech programs, and nearly 300 financial institutions, 30 Fintech focused incubators and accelerators.

The Innovation Institute provides strategic direction, mind-sharing, and monetary resources towards supporting the industry's growth through its active participation on Mass Fintech Hub (MFTH) core leadership strategic team, various work-streams engagements and the MassTech Collaborative Executive Director serves on MFTH's inaugural board of directors.

Mass Fintech Hub Members

- Advisor 360
- Alphastream
- B4B Payments
- Babson
- Brandeis
- Cake
- CashQ Money Transfer
- Citizens Bank
- College Aid Pro
- Divizend
- DocFox
- Eastern Bank
- Fidelity Investments
- FinTech Sandbox
- Flywire
- Insurify
- John Hancock
- MA Competitive Partnership
- Mass Mutual
- Mass Tech Collaborative
- MassChallenge
- Monit
- Napkin Finance
- New Silver Lending
- Northeastern
- OurBanc Corporation
- Pebble Finance
- Physis Investment
- Posh Technologies
- Putnam Investments
- Reading Cooperative Bank
- Reliable Energy Analytics
- Social Trade
- Surround Insurance
- UMass Amherst
- Vestigo Ventures
- Western New England University
- WPI

Current work

Completing progress report measuring change from 2020.

The findings will, not only highlight new activities, but also present an opportunity to realign the landscape for future growth and further position MA as a leading FinTech Hub and destination by distinguishing its ecosystem's economic competitiveness.



Cluster Development Approach



Blockchain

Enabling technology for transformation digital record coordination

Engagement

Blockchain, as an enabler, continues to become a familiar term associated with being a pragmatic technology. As a digital ledger, its computation capability can efficiently transfer information in real time. Its uses across various industries, financial services, healthcare, etc., continues to surface; including among commercial activity in the Commonwealth, e.g., Circle, Simply Vital, etc.

As a priority industry, the innovation institute continues to support, engage with and convene stakeholders across the Commonwealth's blockchain landscape from academia, policy, and industry. We have been a sponsor and participant in Boston Blockchain Week 2022 and 2023 in Quincy, MA. Previously worked with policy makers to raise awareness through a municipal workshop series.



Current work

Convening stakeholder advisory group.

Demonstration project with Worcester Polytechnical Institute in implementing blockchain solutions in non-blockchain focused start-ups, supply chain and social good applications.

Quantum Computing

Identifying key assets and strategic opportunities for emerging sector.

Engagement

Massachusetts has a global competitive advantage due to its outstanding research efforts at different institutes that together cover research into all quantum capabilities: computing, sensing and communication. These three are interconnected and the foundations for further development of all three are present in the state. MIT, Harvard and BU all have large and longstanding activities and provide a highly valuable educational source. An estimated amount of \$50-100M a year is invested in QIS in Massachusetts.

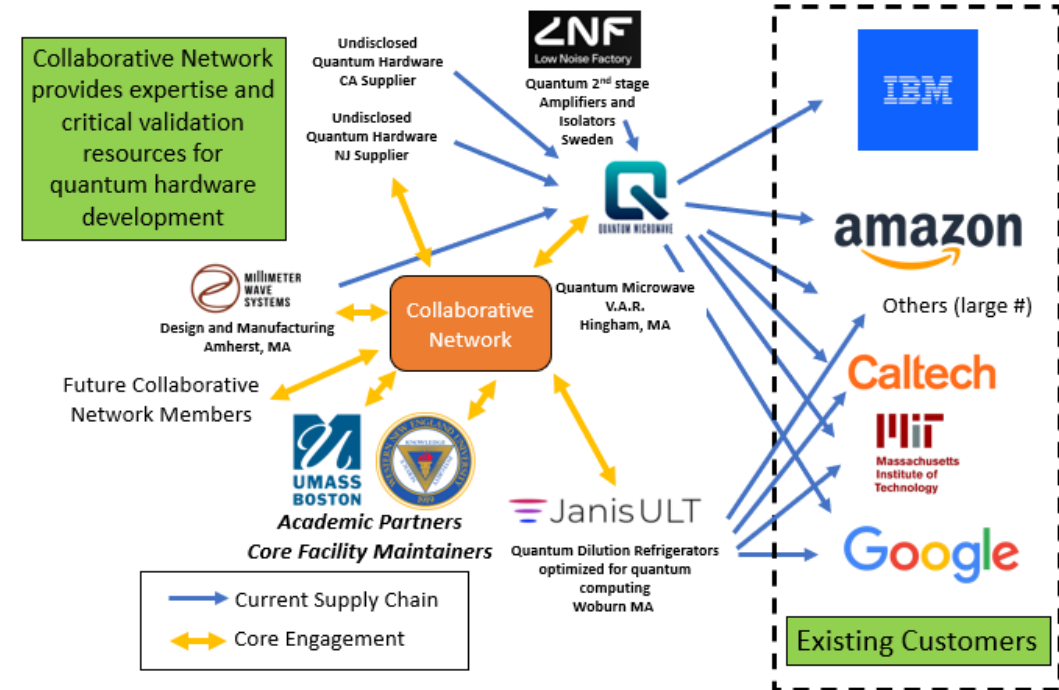
In order to better understand the current quantum ecosystem, the Innovation Institute has commissioned a study to provide analysis, relevant current and predictive market research, and comprehensive assessment of the broader Quantum Computing sector (inclusive of computing, sensing, cryptography) in Massachusetts, including research and development, existing and emerging industry and supply chain participants and identification of emerging markets that align with quantum assets in the Commonwealth.

Current work

Assessment of Quantum computing landscape in MA project 2022-2023

Pursuing development of quantum hub in central Massachusetts with a focus on workforce development, application & supply chain accelerator and installation of quantum level computing equipment

Presenting Quantum Massachusetts conference in Nov, 2023 in partnership with The Quantum Insider



Artificial Intelligence

Engaging key stakeholders to develop a strategy for competitiveness.



Engagement

The AI global market values at an estimated \$136 billion with a trajectory to substantially grow YOY. China is determined to be the global leader in AI by 2030. AI mechanisms, unbeknownst to many, continue to crop up in day-to-day life and also organically percolate commercially. In 2020, American AI start-ups raised \$38 billion. Massachusetts is considered the ‘birth’ place of AI, given its longstanding reputation as a concentrated intellectual hub with Big Tech presence.

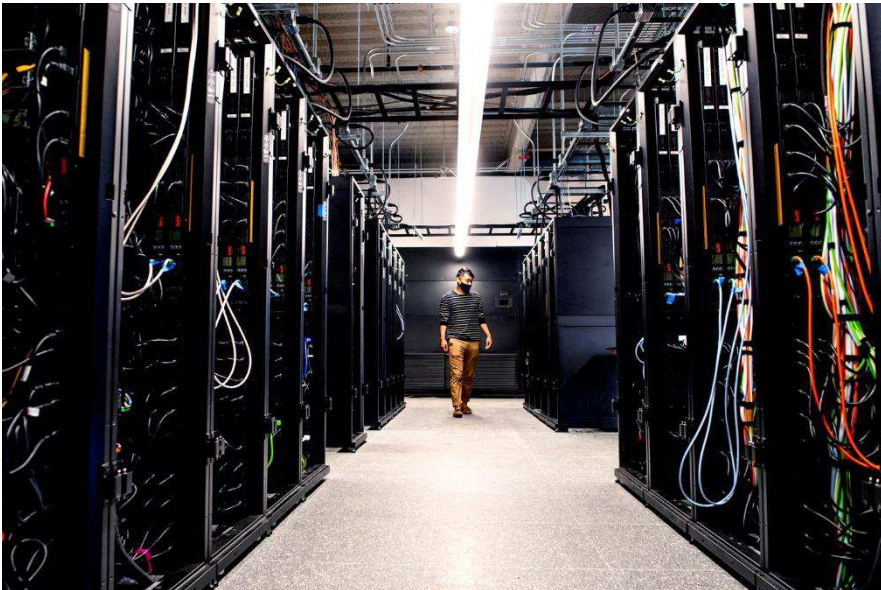
As a priority area, an AI assessment and leadership convening, deferred during COVID, has been relaunched in fall 2022 to discern the state’s economic competitiveness. This assessment will provide an overview of activities in AI in the Commonwealth and identify areas of strength, opportunities for enhancement and benchmarks of AI activity in other selected states and countries. This document will provide a foundation for development of a roadmap for future initiatives in this cluster.

Current work

Preliminary Assessment of AI landscape in MA project late 2022, 2023; coinciding with rise of generative AI

Plan to convene AI Leadership Taskforce in late 2023 to take the assessment further in terms of the analysis serving as a premise for a directional roadmap and potential long-term strategy, likely in sector based AI.

AI Jumpstart



Project

Innovation Institute collaborated with Northeastern University to match Northeastern faculty with projects in priority sectors at Massachusetts tech companies. There were two major interlinked elements of the *AI Jumpstart* Program::

1. \$2 Million in advanced computing infrastructure to support the development, testing and deployment of AI and ML related tools and strategies.
2. \$100K for 20 consulting/seed grant opportunities, priced at \$5K each. This has funded opportunities for individual companies to work directly with Northeastern, Boston University and Tufts faculty (and their student assistants) to develop and deploy new, customized AI and ML technologies to increase and diversify their competitive advantages. This provides hands-on training in relevant problem solving on challenges that are cutting-edge immediately applicable in the marketplace. This experience is supervised and guided by faculty expert consultants, and who typically interact with company technical staff and decisionmakers.

17 professors were funded for projects at 16 Massachusetts companies, with companies receiving \$5,000 stipends and professors being compensated at \$100/hour. Overall, participating companies rated their professor consultants as a 10.26 out of 11 in a closing survey, with 13 of the 16 companies stating they would like to continue working with their professor consultant(s)

Assessment of approach

“Implementing intern-based versions of the AI Jumpstart program at colleges and universities throughout Massachusetts as an expansion of workforce programs would assuredly achieve the stated goals of promoting trackability, promoting strong employer/intern matching, and minimizing MTC administrative burden. Faculty compensated for their work in matching students to internships would be able to effectively track and submit the data on interns at their institutions, expand the pool of possible corporate partners by leveraging the personal networks of said faculty, increase the quality of workplace match between intern and placement company, and shift the overall level of work from Innovation Institute staff to participating faculty. It is likely but not certain that an AI-Jumpstart-like program, if implemented at numerous Massachusetts research institutions of higher learning, will maximize scalability, as the success of pilot programs may not only lead to more participating schools, but also more state funding in the future.”

AI Jumpstart

Participant Outcomes

- 4 SBIR applications as a result of the program: Aura Intelligent Systems, Keva Health, Parrots Inc., and Transmural Systems
 - Aura Intelligent Systems; Applying Machine Learning to securing sensing and communications for 5g networks, to secure them against both environmental interference and deliberate interference and jamming
 - In addition to the continued work with the professor on the SBIR proposal they are also planning to hire interns and new employees
 - Keva Health; Respiratory health monitoring with a focus on asthma
 - Indicated that while they are not currently going to be looking to hire anyone, would be looking for talent in AI as they grow the company.
 - Parrots Inc.; Empower people with neurological disorders. Platform using AI/ML to provide real-time communication, control of environment, and access to teleservices.
 - Hiring new employees and indicated interest in additional interns
 - Transmural Systems; Develop medical devices visible under MRI using AI technologies to enhance the information gathering capabilities of MRI procedures
 - Hiring additional interns and seeking AI training for existing employees

Robotics Research & Development Investment



Harvard University is seeking \$3.05M to develop next generation rehabilitation technologies to improve the lives of people with neuro-motor impairments while contributing to robotics and medical device cluster growth. Advances in the field of soft robotics and digital health have the potential to create a new category of rehabilitation and assistive devices that can be lightweight, affordable and connected. They propose 4 related research projects with potential for near term commercialization:

- Ankle device for home/community-based gait training after stroke;
- Soft robotic glove with new sensing and diagnostic approaches for high dose/high frequency rehabilitation at home;
- Lower-limb neuroprosthesis for electrical stimulation of muscles;
- Wearable sensors for strength and movement assessment by medical and fitness professionals.

Funds will be used to equip facilities at Harvard with tools needed to further develop the technologies in question into prototypes that can be commercialized by the industry partners. Equipment will see use as part of Harvard's broader Assistive Technology Initiative after the prototyping projects are complete.

Partners:

- Universities-Harvard and BU
- 1 publicly traded SME-ReWalk Robotics
- 1 start-up-Imago Rehab



Robotics Research & Development Investment



Key Attributes:

- Stimulus Oriented:
 - High TRL state of projects presents possibility of a quick economic impact
 - \$903K in capital funds spend during FY22, \$2.7M spent in FY 23
 - Job and revenue creation at industry partners projected to begin in year 1
- Strengthens the Massachusetts robotics cluster in the emerging field of soft robotics and creates a pathway to commercialization in healthcare-related end-uses
- Initial projects have some overlap with the digital health cluster and the wider ATI will be able to utilize assets supported by this grant for research and commercialization efforts at the intersection of robotics, healthcare, and software
- Detailed estimates on both job creation and additional revenues, which appear realistic and closely related to the project
- Strong research partnership-BU will receive 25% of funds and provide infrastructure support
- The team has made conscious effort to create a diverse project team and is working to provide research opportunities to diverse students from Bunker Hill Community College
- Beyond economic growth benefits, the medical devices developed as part of this project stand to materially improve the lives of many patients, in Massachusetts and globally

Boston University is seeking \$4,394,848 to build and equip a new Robotics and Autonomous Systems Teaching and Innovation Center (BU-RASTIC). This facility will be used to advance research and prototyping in soft robotics, AI, planning & control systems, and autonomous vehicle algorithms while also expanding the capacity of BU's robotics Masters degree program.

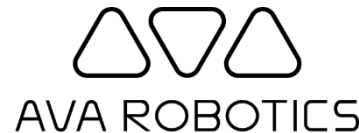
The funds would establish a “neutral space” where companies can directly collaborate with academia, and allow students to undertake increasingly sophisticated research projects on behalf of industry partners while creating connections with future employers in the Commonwealth's robotics cluster.

Facilities will be embedded and managed by the BU Center for Information and Systems Engineering (CISE), the mission of which is “to deepen and broaden interdisciplinary research in the study and design of intelligent systems with broad societal applications.”

These new facilities include: Scaled Miniature City; Soft Robotics Domain; Planning and Control Playroom; and AI Zone.

Partners:

- Nonprofit- MassRobotics
- 6 Private companies- Intel, Ava Robotics, Boston Scientific, GreenSight, AETLabs, Ubiros



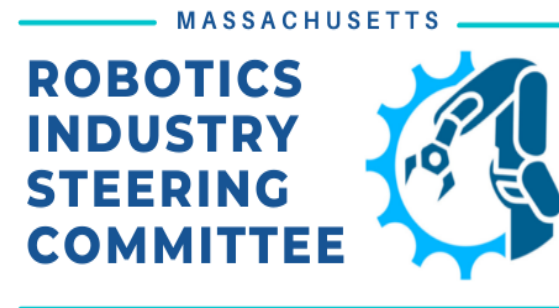
Robotics Research & Development Investment

Key Attributes:

- Stimulus Oriented:
 - RASTIC will help address the ongoing talent shortage (a major barrier to expansion of robotics firms) by enabling BU to train approximately 80 additional graduate students annually.
 - The facilities are intended for student capstone projects designed and executed in conjunction with industry, and the applicant provides examples of previous projects that have led to a new product or start-up.
- Cluster Thinking: Four, high-impact areas of opportunity align with existing Massachusetts cluster strengths - Autonomous Aerial Vehicles, Connected Autonomous Vehicles, Medical Robotics, and Soft Robotics.
- Economic Development: Enables more complex projects using materials, sensors, and systems integration for new functionality in prototypes developed and tested by students and faculty at the facility, making collaboration more valuable to industry partners.
- Talent & Equity:
 - BU currently enrolls women in engineering studies at rates above the national average and has grown the representation of women and underrepresented minorities in its undergraduate population.
 - BU will leverage RASTIC for its ongoing engagement with 21 K-12 schools (15 in low-income districts) and BU's expanded degree program will provide more mentors and expand to create a summer program for participating K-12 students.

Robotics Industry Steering Committee (RISC)

The Innovation Institute convenes a forum of stakeholders across the Massachusetts robotics ecosystem to collaboratively identify challenges and growth strategies for the cluster.



RISC MEMBERSHIP

Executive Sponsors



Tye Brady
Amazon Robotics



Colin Angle
iRobot



Laura Major
Motional



Tom Ryden
MassRobotics

Members



Brendan Schulman
Boston Dynamics



Holly Yanco, Ph.D.
UMASS Lowell



Rick Faulk
Locus Robotics



Vijay Somandepalli
American Robotics



Daniel Theobald
Vecna Robotics



Tina Collins
Greater Lawrence
Tech. HS



Kristopher Carter
City of Boston
New Urban Mechanics



Christine Nolan
Center for Advanced
Manufacturing



Thomas Vaneck
Kostas Research
Institute, Northeastern



Conor Walsh, Ph.D.
Harvard



Waseem Naqvi
Raytheon



Mark Smithers
Boston Engineering



Sean Andersson, Ph.D.
Boston University



Greg Lynn
Piaggio Fast Forward



Elizabeth Murphy
Piaggio Fast Forward

The Role of the Robotics Industry Steering Committee (RISC)

The Innovation Institute, working in close partnership with MassRobotics and other key industry, academic, and nonprofit leaders, has established the RISC as the **convening forum for stakeholders across the Massachusetts robotics ecosystem** to collaboratively identify challenges and growth strategies for the cluster.

The Innovation Institute, along with the Massachusetts Executive Office of Housing & Economic Development, relies upon the RISC to **provide objective insights into the design and implementation of state programs and initiatives that support growth within the robotics industry cluster.**



THE INNOVATION INSTITUTE
at the MassTech Collaborative

Massachusetts Robotics Ecosystem

Strengths

- **Critical mass of 400+ robotics companies** with diverse range of applications spanning air, land, and sea
- **Highest concentration of large robotics companies** (*iRobot, Amazon Robotics, Brooks Automation, Teradyne*)
- 36 world-class **robotics-focused research institutions** and university programs
- Robust environment for **R&D** (*1 in 4 robotics patents in the US are filed by MA inventors*)
- Record of **successful private-public partnerships** among government, industry, and academia
- **Job Creation** – the top 25 robotic companies in MA employ >5,000 MA residents
- **Thought leadership** (*e.g., MassRobotics Interoperability standards*)



Weaknesses

- No **marketing strategy to promote the MA robotics sector** and attract/retain talent and companies
- Difficulty in **accessing test facilities** and **lack of real world testing opportunities**
- Insufficient sources of **early-stage capital** and **robotics-focused accelerators**, and **robotics mentor networks** to support the commercialization of new technology (*MA attracted 3% of robotics VC funding in 2021, compared to CA's 81%*)
- Lack of **integration support to encourage adoption of robotics technology** within other key innovation sectors
- **Talent shortage** and skills gaps, particularly for robotics technicians and perception engineers

12 Recommendations to preserve and advance Massachusetts' preeminent robotics sector





TALENT

-  Engage industry partners to **scale project-based robotics education**
-  Address demand for **robotics technicians** by scaling community college-based training programs





MARKETING

-  Establish a **state-wide industry concierge** to facilitate connections in the ecosystem that build community and drive business growth
-  Launch unified **marketing campaign** and content strategy to attract and retain companies and talent





INNOVATE

-  Preserve thought leadership role through **design and advocacy of robotics standards**
-  **Scale robotics-related R&D** across the state and encourage collaboration among research institutions and industry experts
-  Increase access to **real-world test environments** within the public domain





COMMERCIALIZE

-  Accelerate commercialization of new technology through expanded access to **equity-free early-stage funding, robotics-related mentor networks, and hardware accelerator programs**
-  Become the first place DoD looks to source robotics & AI technology by supporting **commercialization of dual-use technologies**




ADOPT

-  Support **greater robotics integration** among small and mid-sized manufacturers
-  Encourage robotics innovation and adoption in underutilized sectors, such as **agriculture and healthcare**



COMMUNITY / INNOVATION CENTER

-  Establish a **robotics innovation center** to serve as the hub for the robotics community in Massachusetts and enable collaboration across institutions, disciplines, and regions

Expected Impact

Job Creation

500 new jobs created by robotics startups within 3 years

Increased translational R&D

More world-class researchers enticed to join MA universities and become members of research consortium to gain access to industry-sponsored R&D projects

Business Formation

Increases in both robotics startup formation rate & robotics corporations with presence in Massachusetts

Talent Development

Experiential learning opportunities, industry mentorship, and technician training creates a pipeline for robotics workforce

Talent Retention

Increases in graduate retention rates and placements within MA robotics firms

Attract Private Capital

\$100s of millions in new venture capital flowing to Massachusetts robotics companies

Multiplier Effects

R&D and commercialization of transformative robotic technology with cross-sector applications will unlock exponential economic growth throughout the Massachusetts innovation economy

Robotics Department (pending)

Innovation Institute received a \$5 million appropriation to support the robotics industry from the Commonwealth of Massachusetts. A portion of the funding is being used to establish a Robotics Department. MassTech's program plan focuses upon catalyzing a comprehensive statewide cluster development effort for the robotics industry in Massachusetts and enable expanded capacity within the Innovation Institute to support robotics R&D, testing, commercialization, and workforce development activities.

Programs to be implemented with the ARPA funding span three program areas: Ecosystem Development, Technology Commercialization, and Workforce Development.

- The **ecosystem development** programs aim to strengthen connections between robotics ecosystem stakeholders and build Massachusetts' profile as a global leader in robotics.
- The **technology commercialization** programs aim to provide startup support services, access to resources, and expert mentorship to early-stage robotics companies.
- The **workforce development** programs aim to meet the industry need for middle-skill workers trained to work with robotic systems and expand access to careers in robotics to populations that have historically been underrepresented in the innovation economy.

MassRobotics will design and execute 5 projects from September 2023 –December 2025.

Robotics Accelerator Program | \$520,000 MassRobotics will create, implement, and manage a robotics accelerator program to be based at their location in Boston. They will organize a cohort-based accelerator program to provide mentorship, educational programming, and access to resources to participating business enterprises, culminating in a public pitch event or demo day for each cohort. The Innovation Institute will provide operating funds to facilitate the execution of at least two accelerator cohorts over two years of program operations. It is anticipated that at least 20 companies will be supported by the accelerator over two years. Each company will receive non-dilutive grants (up to \$100,000 each, not included in the \$520,000 award) from MassTech to help accelerate the development of their products.

Startup Community Support | \$50,000 MassRobotics will expand its program offerings to its resident companies and create an ecosystem map for robotics startups to easily identify available resources.

Working Groups & Industry Support | \$35,000 MassRobotics will expand its support of emerging industry trends through the convening of working groups. MassRobotics currently supports 4 working groups: healthcare, AMR standards, drones, and Automated Vehicles. This award would enable MassRobotics to continue supporting these groups and add an additional group focused on clean energy & robotics.

Ecosystem Promotion & Recruitment | \$100,000 MassRobotics will serve as an ambassador of the Massachusetts robotics ecosystem and represent the Commonwealth at national or international robotics tradeshow and conferences.

Jumpstart Fellowship Program Expansion | \$260,000 MassRobotics will expand the Jumpstart Fellowship program to increase access to robotics career training for underserved students in a secondary Massachusetts location, in Lowell.

Robotics Department (pending)

Workforce Training

MassTech will partner with Northeast Advanced Manufacturing Consortium (NAMC) to design and gain approval for a registered robotics technician apprenticeship in Massachusetts and line-up robotics and advanced manufacturing companies to offer the apprenticeships. The purpose of these apprenticeships is to meet industry demand for middle-skill workers with electro-mechanical skills necessary to install, operate, and repair robotic systems.

NAMC will create and implement a two-year pilot cohort-based **Robotics Technician Registered Apprenticeship Program** between October 2023 and June 2026 to support 20 apprentices. Apprentices will be employed full-time by partner employers (to be identified in the planning phase) and receive 300 hours of related technical instruction. In the first year, the first cohort of approximately 10 apprentices will participate in a 19-week training program hosted by Greater Lawrence Technical High School in which participants will attend classes 2 nights per week. The second-year training will likely be offered by a North Shore-based community college.

Organizational Support

The Innovation Institute will hire a Director of Robotics to oversee implementation of these plans and to develop strategies for growth and sustainability of a dedicated Robotics program within MassTech.

Contact

Jason Hoch
Deputy Director
Innovation Institute @ the Massachusetts Technology Collaborative
hoch@masstech.org



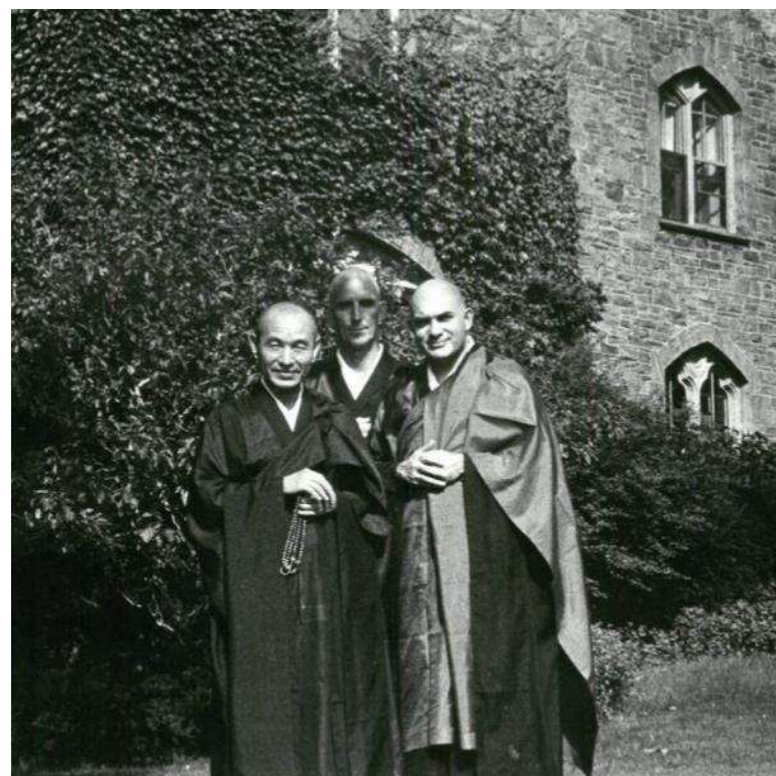
Greyston Bakery

GREYSTON

Greyston Bakery B-Corporation

Our Story

- In 1982, Greyston launched a world-changing brownie to help people facing barriers to employment.
- It all started with a Buddhist and a bakery. Since then, when people say, yes, I want to work; we say yes right back. We call it **Open Hiring®**.
- When you buy our brownies, you are part of our trust-building, future-making, truly life-changing revolution.



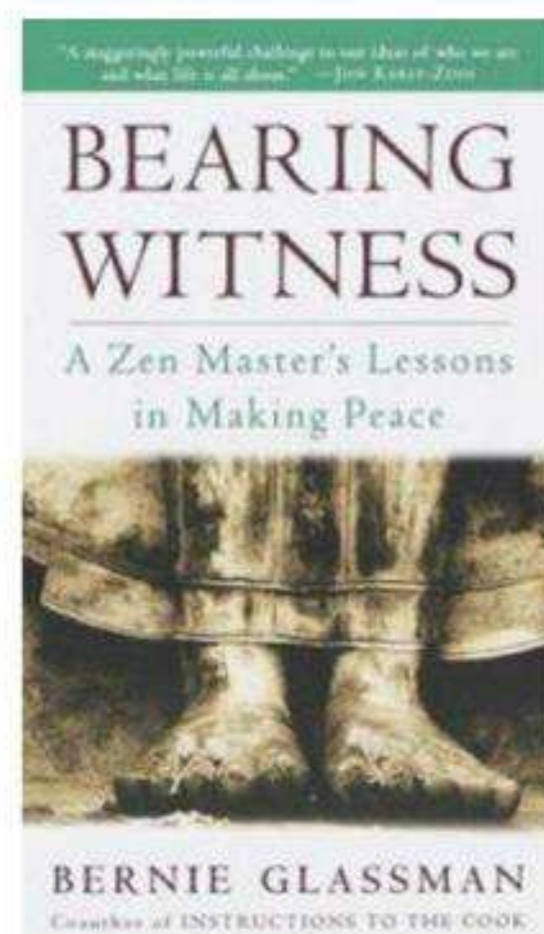
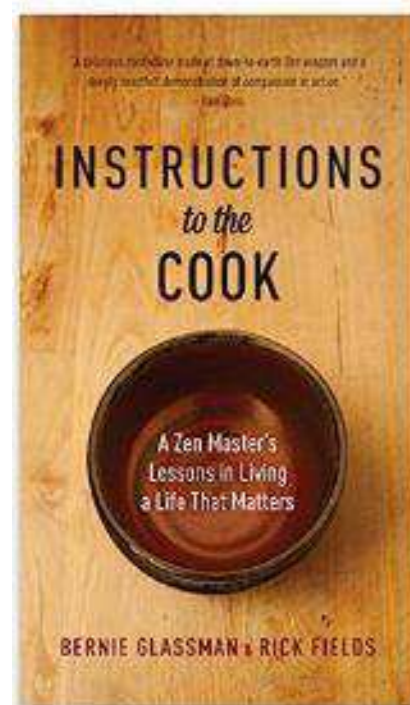
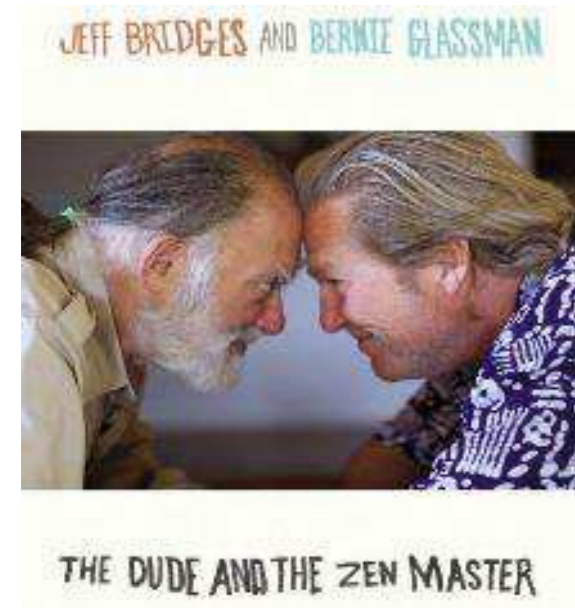
What is **Open Hiring**?

Open Hiring is a model **based on trust in human potential** that provides access to employment to anyone - without judgement or asking any questions. **Just sign up: NO background checks, NO resumes, NO interviews**

By focusing on human potential rather than a person's past actions, Open Hiring **removes unnecessary barriers** to employment and provides employment, training, and benefits opportunities to **marginalized populations.**

Bernie Glassman, our founder

- Aeronautical Engineer
- Founder, Greyston Bakery & Greyston Foundation
- Founder, Zen Community of NY
- Founder, Zen Peacekeepers organization
- Zen student, master, teacher
- President, Soto Zen Buddhist Assoc. of America
- Co-Founder, Stone Soup Cafe (Mass.)
- Author/co-author of 6 books
- Leader of worldwide spiritual retreats



Bernard Glassman, Zen Master and Social Activist, Dies at 79

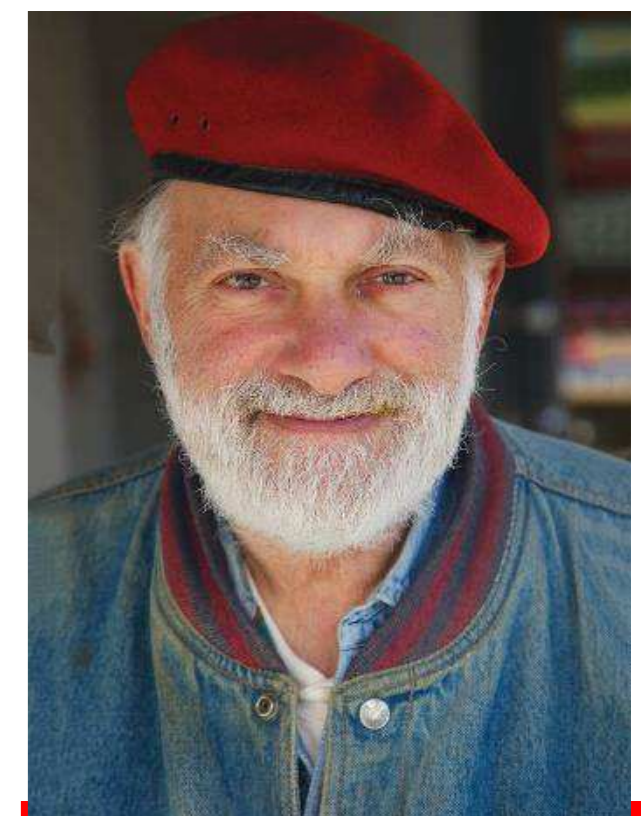
[nytimes.com/2018/11/23/obituaries/bernard-glassman-dead.html](https://www.nytimes.com/2018/11/23/obituaries/bernard-glassman-dead.html)

Katharine Q. Seelye

November 23, 2018

[Continue reading the main story.](#)

Bernard Glassman, an acclaimed American Buddhist teacher known for his social activism and, briefly, a venture with the actor Jeff Bridges to capitalize on Zen-like traces in the movie "The Big Lebowski," died on Nov. 4 at a hospital in Greenfield, Mass.



Our Principles

 <p>RESPECT</p> <p>We value and learn from what makes each of us different.</p>	 <p>COMPASSION</p> <p>We equip each person with the tools to be successful, understanding they have their own story.</p>	 <p>NON-JUDGEMENT</p> <p>We understand that all members of a community are interconnected and have a unique role to play and contribution to make, regardless of their past.</p>	 <p>COLLABORATION</p> <p>We seize opportunities to develop solutions and innovate for the greater good of our organization, employees, and those we serve.</p>	 <p>EMPOWERMENT</p> <p>We create the conditions for each person to become self-sufficient, honoring their freedom of choice.</p>	 <p>TRANSFORMATION</p> <p>We are committed to fostering meaningful growth in our communities and the world at large.</p>
---	---	--	--	--	--



Our core values are aligned with traditional Zen Buddhist teachings, and are on display in a well-traveled area in the bakery for all to see, as well as to experience everyday.

Roshi Bernie Glassman and his wife Jishu Angyo Holmes created:

3 Tenets of Socially Engaged Buddhism

- **Not Knowing** – “beginner’s mind” - questioning
- **Bearing Witness** – to injustice and inequality
- **Compassionate Action** – loving & healing action

Support – Access to on-site support is a key to success

PROGRAM

EMPLOYMENT PATHMAKER

On-site case worker to support Greyston employees and clients with personal challenges and career advancement



IMPACT

EMPLOYEE SUPPORT

~2/3 of Bakery employees have sought services including housing, legal assistance, mental health, and substance abuse

RETENTION

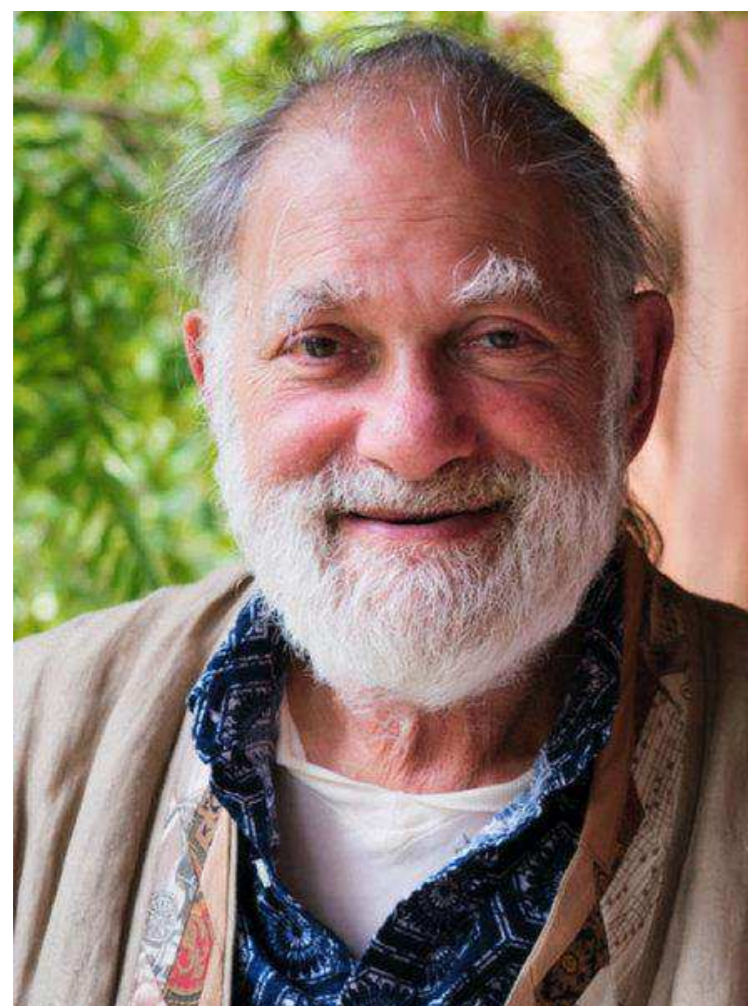
~50% of Bakery employees retained throughout first year

ON-THE-JOB SUCCESS

Increased productivity, team cohesion, and worker attitude

History

GREYSTON
BAKERY
GIVE BROWNIES. CHANGE LIVES.



1982

Bernie Glassman co-founds the Greyston Bakery to employ the homeless

1987

Bernie meets Ben Cohen and Jerry Greenfield and the famous B&J Chocolate Fudge Brownie is born

1992

The Greyston Foundation moves into new Yonkers home for support services programs and the Center for Open Hiring

2004

Greyston moves from small former lasagna factory to a new, larger bakery built down the street



Vermont's Finest

BEN & JERRY'S

**Chocolate
Fudge
Brownie**

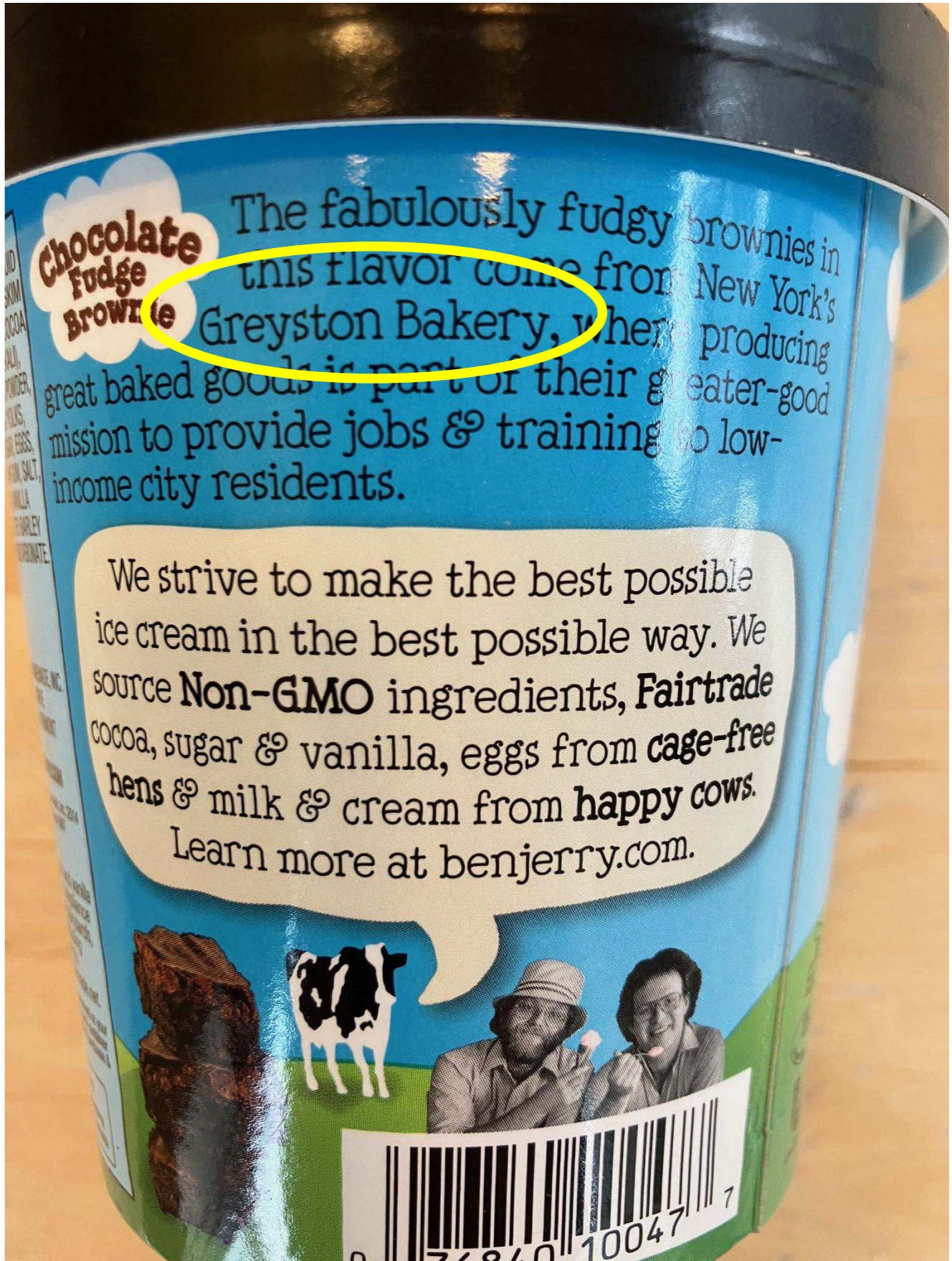


**Chocolate Ice Cream
with Fudge Brownies**

Ben & Jerry's Partnership

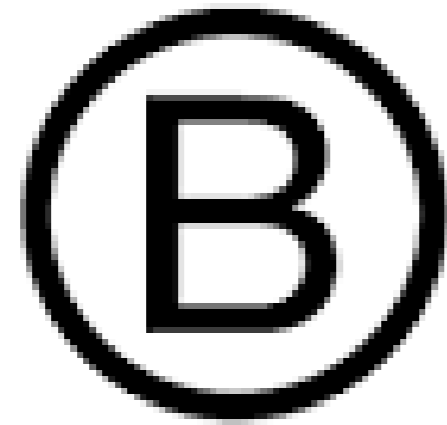
LINKED PROSPERITY with B&J'S to THREE-PART MISSION:

PRODUCT – ECONOMICS - SOCIAL MISSION



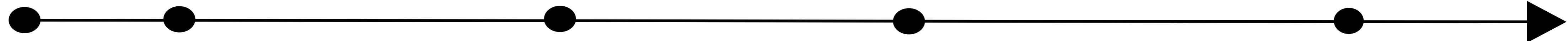
Greyston Bakery History

Certified



Corporation™

bcorporation.net



2008

Joined B Lab's movement – "Business as a Force for Good"
- First in NY State

2012

Retail 2.5 oz brownies launched in retail channel via Whole Foods

2016

Launched vegan brownies with Whole Foods and B&J's (non-dairy ice cream)

2017

Mini-brownies first launched in Foodservice channel via Delta and now sold in Cava restaurants

Bakery At A Glance



Bakery Stats:

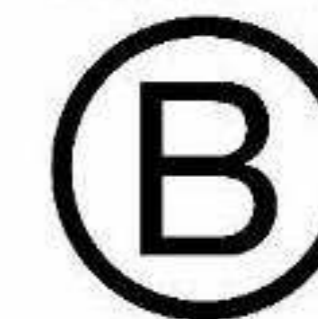
- 100 Employees
(65 Bakers | 35 QA, Maintenance and Management)
- Run a 24 hour operation 4-6 days a week
- Two locations based in Southwest Yonkers, NY
(23k square foot plant + 30k warehouse)
- Use the highest quality ingredients and never use artificial preservatives, sweeteners or hydrogenated fats
 - Long term contracts with major suppliers for Fair Trade sugar and cocoa, non-GMO ingredients, Cage-free eggs
- Building partially designed by world-famous architect

CERTIFICATIONS

- SQF/GFSI Certified Facility
- Kof K Kosher Dairy /D.E. Certified / Parve
- B Corp Certified



Certified



Corporation

This company meets high standards of social and environmental impact.

*Greyston Bakery
Designer*



Per Wikipedia page

Name	Maya Lin
Born	October 5, 1959 Athens, Ohio, U.S.
Nationality	American
Education	Yale University
Known for	Land art, architecture, memorials
Notable work	Vietnam Veterans Memorial (1982) Civil Rights Memorial (1989)
Awards	National Medal of Arts Presidential Medal of Freedom
Website	<u>mayalin.com</u>

GREYSTON FOUNDATION



Bakery 100% owned by non-profit Greyston Foundation:

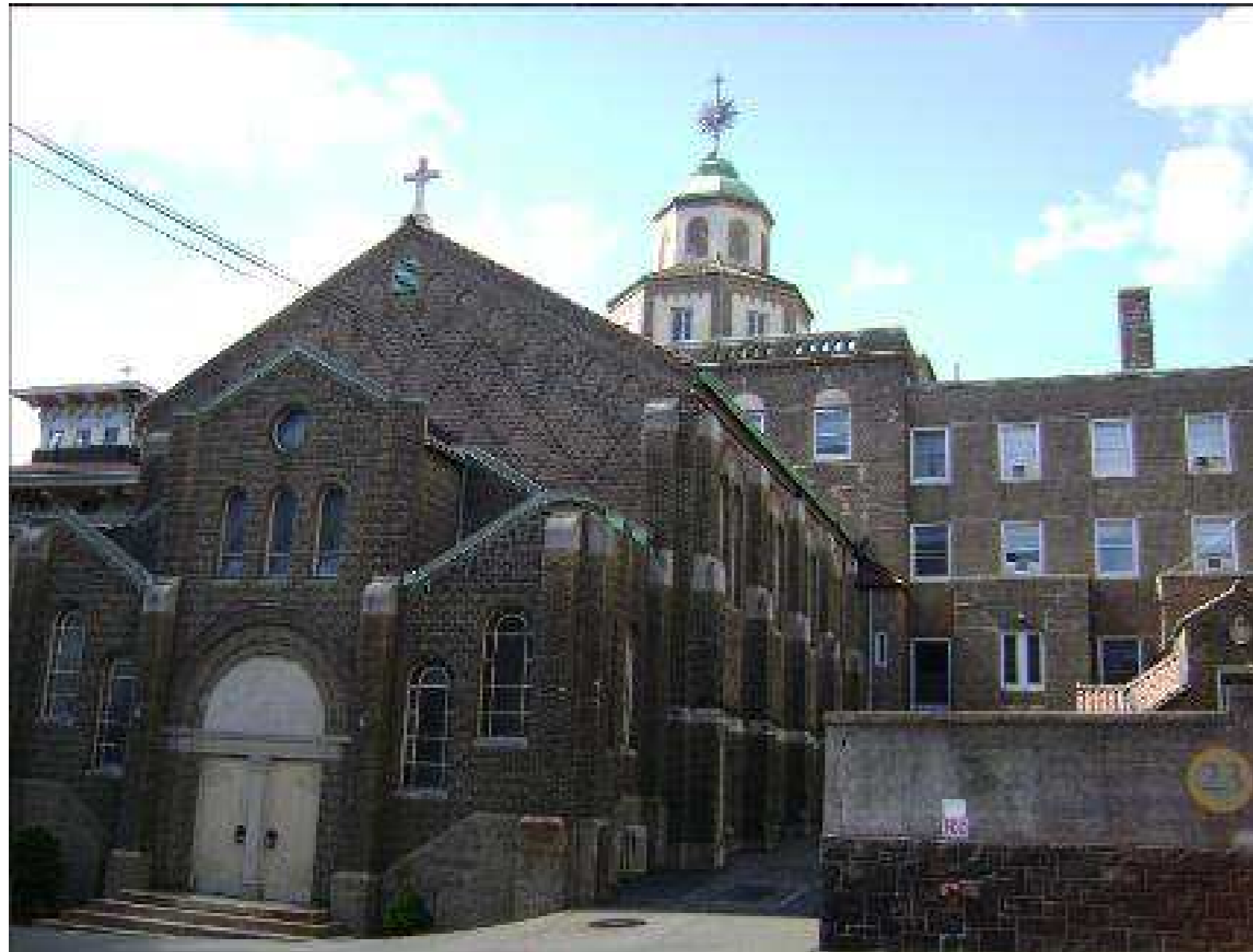
- Mission is to promote Open / Inclusive hiring
- Assist other companies in adopting OH
- Provide in-demand job training

Overall Foundation Mission:

“DEMONSTRATE > EDUCATE > REPLICATE” (re: Open Hiring)

Greyston Foundation Building history:

- 1850s Ethan Flagg House
- 1915 Blessed Sacrament Monastery - Sacramentine Nuns – Girls Academy
- 1990s Greyston Foundation – Zen sanctuary, offices, AIDS housing
- 2023 – sold to developer for affordable housing
 - Foundation offices moving to Getty Square in downtown Yonkers



Product Offerings

- Frozen baked inclusions: Chocolate Fudge Brownie, Vegan Fudge Brownie, and Blondie for ice cream
- Individually wrapped grab-and-go brownies and blondies for retail and private label
- Gifting with assorted individually wrapped brownies and blondies available at Greystonbakery.com, Uncommon Goods, Gifts for Good and Amazon



~85% of sales

Commercial ingredients



New



E-Commerce / Gifts



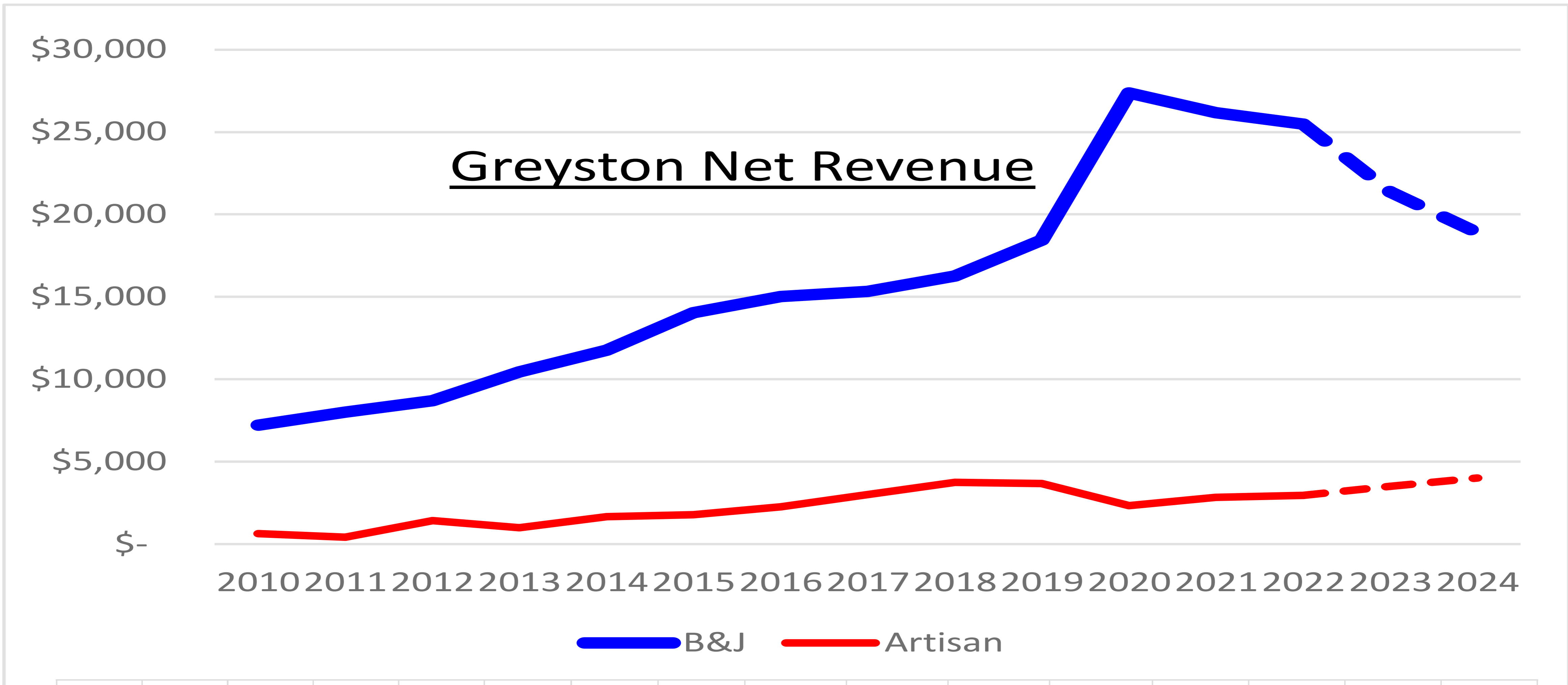
New

Retail



Foodservice

Sales Growth: 2010 – 2024



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Projected 2023	Estimate 2024
\$ Sales															
B&J	\$ 7,229	\$ 8,013	\$ 8,701	\$ 10,461	\$ 11,775	\$ 14,031	\$ 15,020	\$ 15,329	\$ 16,268	\$ 18,446	\$ 27,365	\$ 26,182	\$ 25,479	\$ 21,373	\$ 18,900
Artisan	\$ 629	\$ 422	\$ 1,416	\$ 996	\$ 1,668	\$ 1,776	\$ 2,275	\$ 3,002	\$ 3,750	\$ 3,671	\$ 2,331	\$ 2,831	\$ 2,960	\$ 3,500	\$ 4,000
Total	\$ 7,858	\$ 8,435	\$ 10,117	\$ 11,457	\$ 13,443	\$ 15,807	\$ 17,295	\$ 18,331	\$ 20,018	\$ 22,117	\$ 29,696	\$ 29,013	\$ 28,439	\$ 24,873	\$ 22,900
%chg		7%	20%	13%	17%	18%	9%	6%	9%	10%	34%	-2%	-2%	-13%	-8%

How does Open Hiring work?

HIRING	ORIENTATION	APPRENTICESHIP	G R A D U A T I O N !	FULL TIME EMPLOYMENT
<ul style="list-style-type: none"> Apply online Via scan code In person @ bakery 	INTRODUCTION TO VALUES & CULTURE	6 – 10 MONTH DURATION		UNION MEMBERSHIP
	QUALITY ASSURANCE	BI-WEEKLY EVALUATIONS WITH SUPERVISOR		UPSKILLING OPPORTUNITIES
CURRENT WAIT TIME ~6 MONTHS	WORKER READINESS	ONGOING SKILLS EVALUATION		CAREER DEVELOPMENT
	INTRODUCTION TO THE PRODUCTION FLOOR	MENTOR SUPPORT		ASCENSION TO SALARIED (OR EXTERNAL)
<p style="text-align: center;">WESTCHESTER JEWISH COMMUNITY SERVICES SUPPORT (via full-time on-site case worker)</p>				

Points System

- But while fully open entry, apprenticeship opportunity not a free pass to permanence

Action	Points
Late (Less than 1 hour)	0.5
Late (More than 1 hour, with/without notice)	1.0
Partial Day (Unexcused early departure)	0.5
Absence (With timely call)	1.0
Absence (without timely call)	1.5
Absence (No call)	3.0

Points System

- Key is clear, ongoing communication and fair, consistent application

1. Verbal Warning

- Issued after accumulating 2.5 points.

2. Written Warning

- Issued after 5.0 points.

3. Suspension

- Issued after 7.5 points.

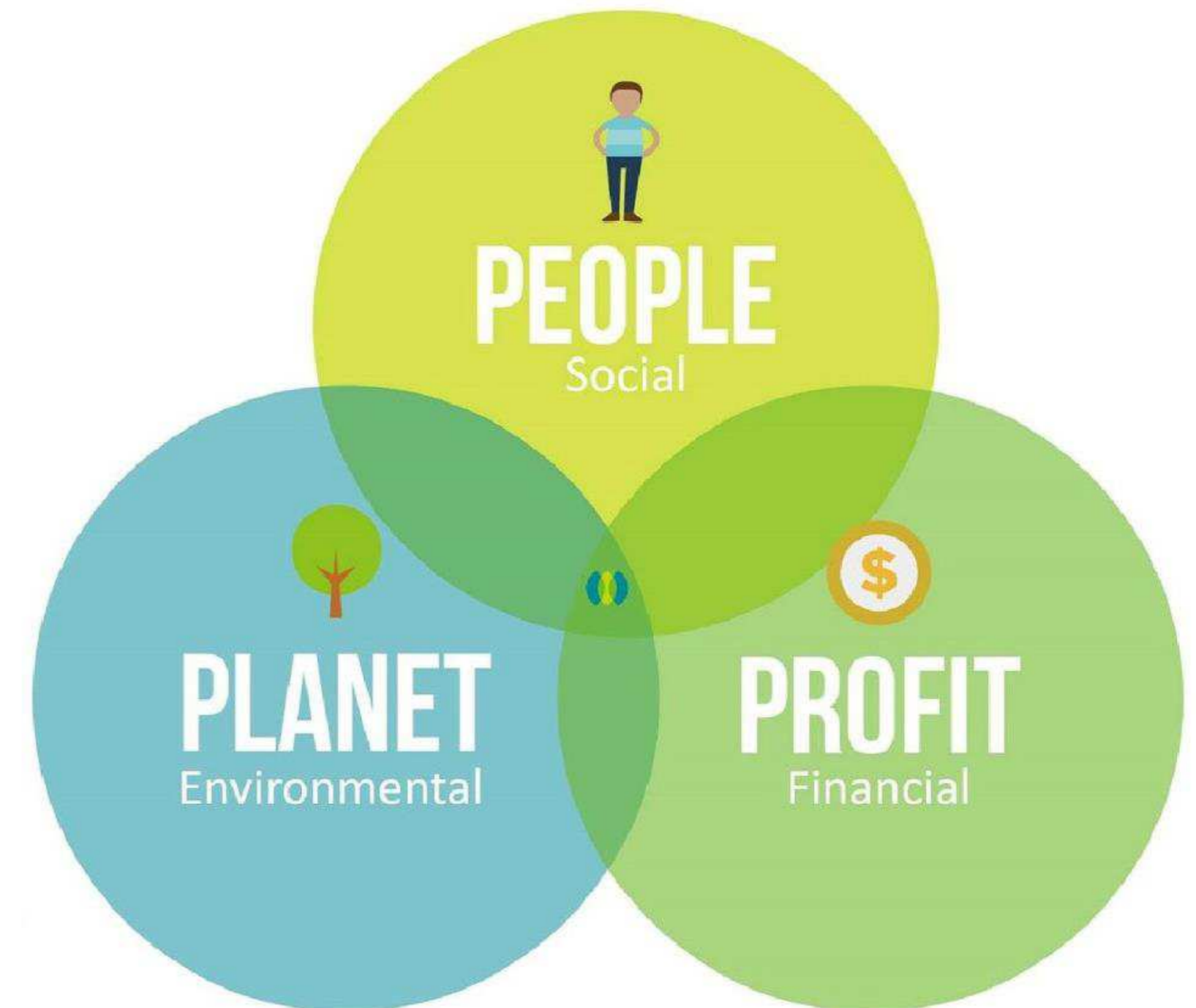
4. Termination

- After reaching 10.0 points.

- For each action, a memo documenting discipline will be given to employee and placed in employee file.
- Points have to be accumulated within a “rolling” 12-month period.
- Points older than 12 months will drop off & no longer be counted towards disciplinary action.
- 1 point removed for every 3 months with perfect attendance
- Only employees with no points are eligible for quarterly bonuses of \$100 - \$500

B-Corporation

- Certified B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance **profit and purpose**.
- B Corps are accelerating a global culture shift to redefine success in business and build a more inclusive and sustainable economy.
- B-corps often structure their measurement systems around the **Triple bottom line**:
 - PEOPLE (social)
 - PLANET (environmental)
 - PROFIT (financial)



How to become a Certified B-Corporation?

- A B-Impact Assessment must be completed and companies must score a certain amount of points to achieve certification
- Greyston Bakery have been a certified B-corporation since 2012 and were recently awarded Best For The World 2022 - Community



B CORP RATINGS

96.3
TOMS

151.5
PATAGONIA

137.8
GREYSTON

Note: Minimum score 80 and highest ~180

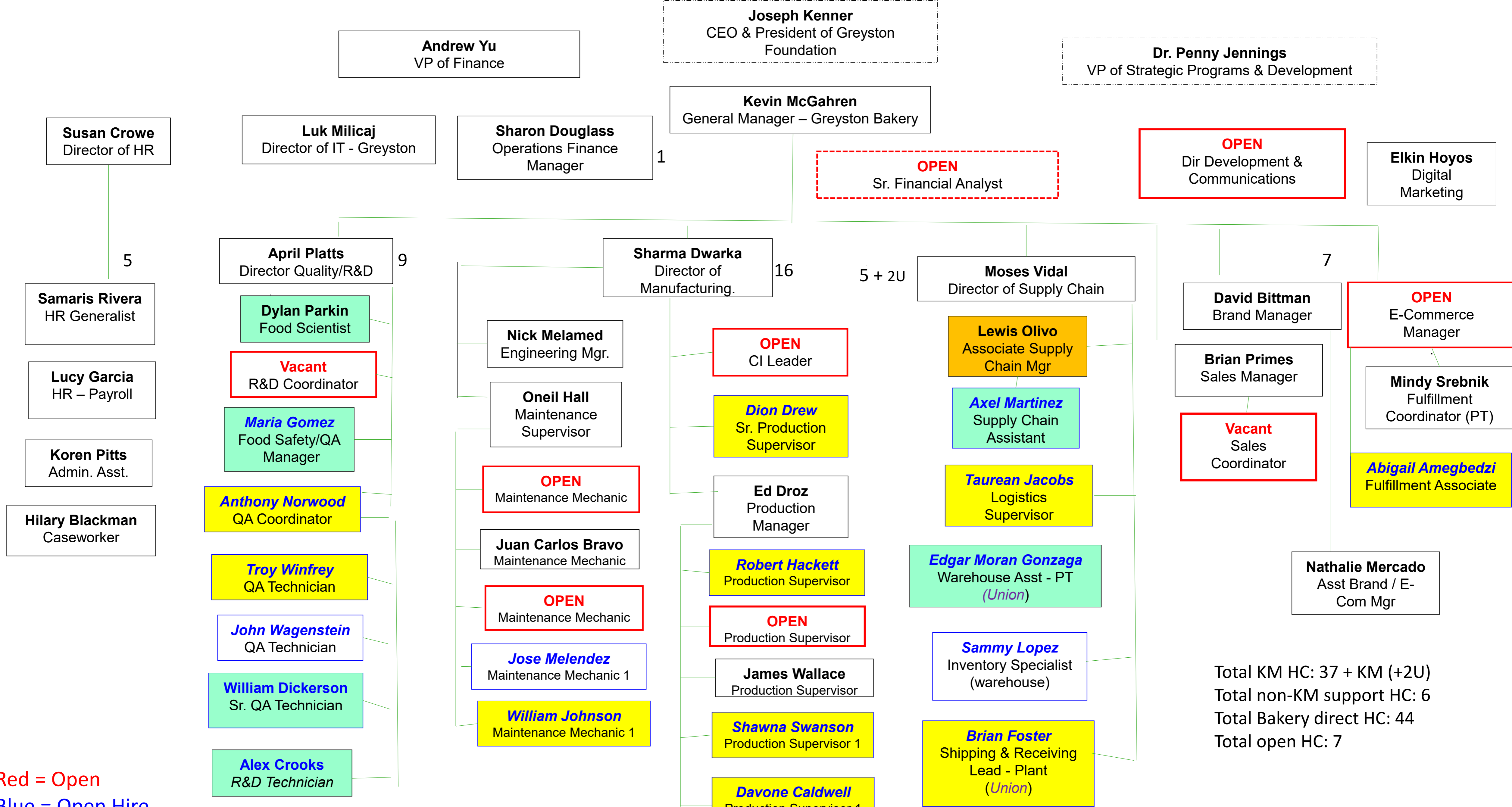


*Ben & Jerry's
Cabot Cremery
Plum Organics*

*Warby Parker
7th Generation
Method Redbox*

*Etsy
Allbirds
The Honest Co.* *New Belgium Brewery
The Body Shop
Happy Family*

Bakery Team



Total KM HC: 37 + KM (+2U)
 Total non-KM support HC: 6
 Total Bakery direct HC: 44
 Total open HC: 7

Red = Open
 Blue = Open Hire

Yellow highlight = Open hire promoted in 2022

Green = 2023

Orange = Cross-functional lateral

Updated by: K. McGahren 10/5/23

Total HC = 61 + 5 OH pending

Packing room

(LB) -14

Leads:

- **Dominique Stephens**
- MARIA GRANADOS
- LILIAN LARA PARADA
- Michael CLEMONS
- Lilian ALFARO-LARA
- Eva Salazar
- Angela Mejia
- Christina Rivera
- Olga Olson
- Steven Webster
- Jonathan Syphax
- Luz Rodriquez Romero
- Jimmy Altamirano Aguilar
- Andres Mejia

Day shift

Mixers -7

Lead:

- **STEVEN SANCHEZ**
- D'andre Pressley
- Branden Stanley (+AB)
- Paul CAMAS* (+AB)
- BERNARD ANDERSON (+AB)
- Evans Owusu Boafo (+AB)
- Monte Dixon

Packing room

(AB) -10

Lead:

- **Gena ANDERSON***
- AMALIA MIGUEL
- Ronald Samson
- Altagracia Genao
- Elvira Moran
- Edgar Moran Gonzaga
- Paula Pavia Guzman
- Enerolisa Acosta
- Clara Chunchi
- Christian Gomez

Bakery Union Staff

Sanitation -5

Lead:

➤ **Quentin FREDERIC**

- <- ~~Felix Rodriguez~~
- <- Alvin WILSON
- <- Kareem Leake
- Darrell Tucker →

Shipping & Receiving -1

➤ **Brian Foster** (afternoon / evening)

Night shift

Mixers (LB) -4

➤ **OPEN**

- KWADWO KONADU
- REGGIE JONES
- Gerson Zalava Lara
- Elvis Morrison

Packing room

(LB) - 20

Leads:

➤ **William Dickerson***

➤ **David Mosely**

- Tanika CAMPBELL
- Luis Maldonado*
- John Sullivan
- Javier Gonzalez
- Derek Reeves
- Edwin Santiago
- Edward Benjamin
- Corina Rivera
- Lisa Johnson
- Nene Mamudu
- Lucy Morreno
- Safina Shefayee
- Malston Patrick
- Cassonya Pugh
- Alfred Appiah
- Lawrence Dabie
- Faustina Mussington
- Brandon Reid

Talent Pipeline:

QA Tech in training:

- Eva Salazar
- Malston Patrick

R&D Tech in training:

- Tbd
- Tbd
- Tbd

Production lead in training:

- Lilian Alfaró-Lara
- Edgar Moran
- John Sullivan
- Derek Reeves

Mechanics pipeline:

- Kareem Leake
- Christian Gomez
- Tbd

Production Sup in training:

- Steven Sanchez
- Tbd
- Tbd

Mixers in training:

- Elvis Morrison
- Tbd

Forklift experience / training (Aug 6th class):

- (AM) Kareem Leake, Branden Stanley, Evans Boafo, Edgar Gonzaga
- (PM) David Mosely, John Sullivan, Javier Gonzalez, Robert Hackett

ALL CAPS = > 10 years tenure
Only LAST name in caps = > 5 years tenure

Bold = Line Lead

Blue = Line Staff II

Green = Line Staff I

Red = Apprentice

Strike through = on leave

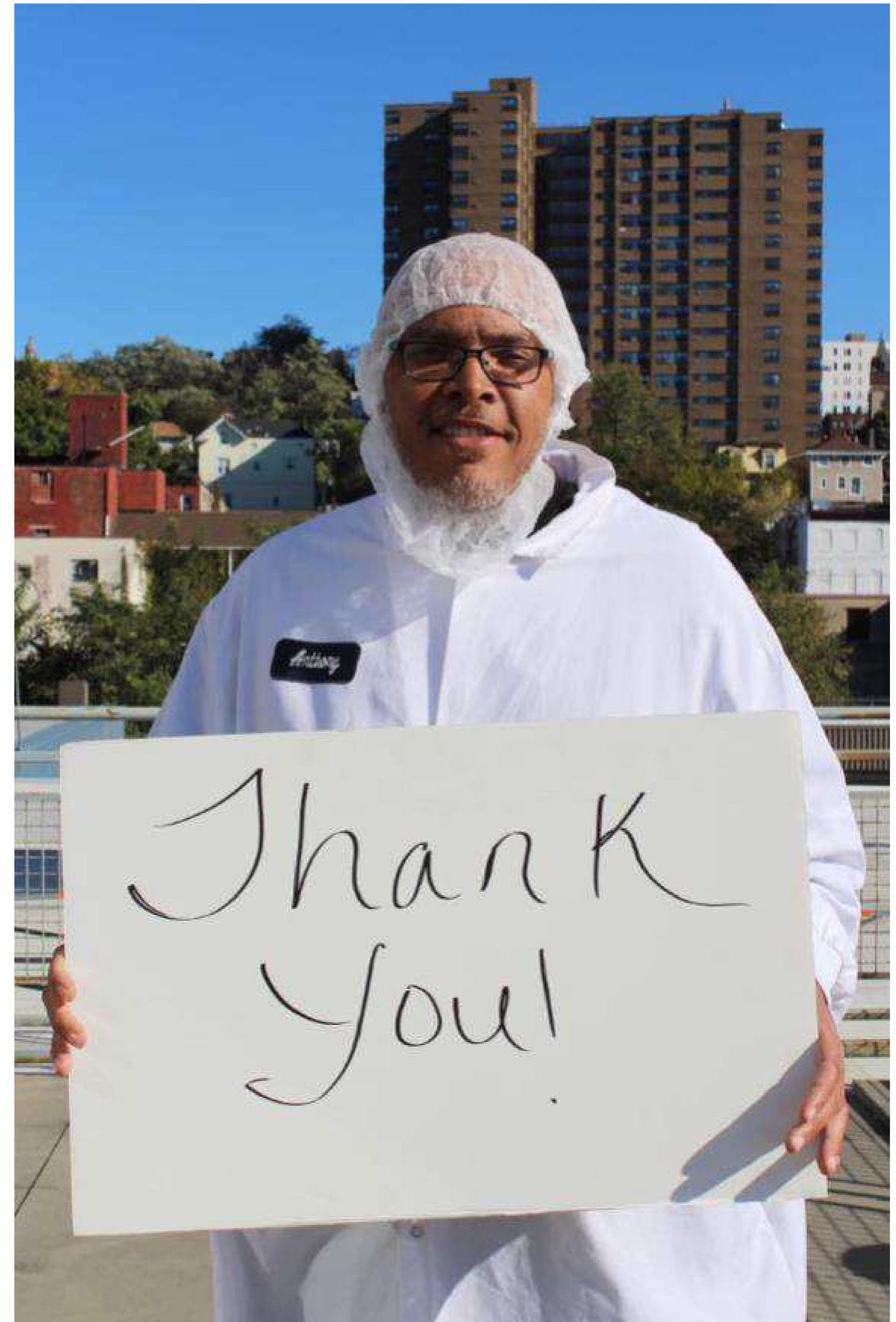
**Union shop steward*

Open Hiring- Dion's Story

<https://youtu.be/pyl7pwbtNBo>




GREYSTON
BAKERY
GIVE BROWNIES. CHANGE LIVES.



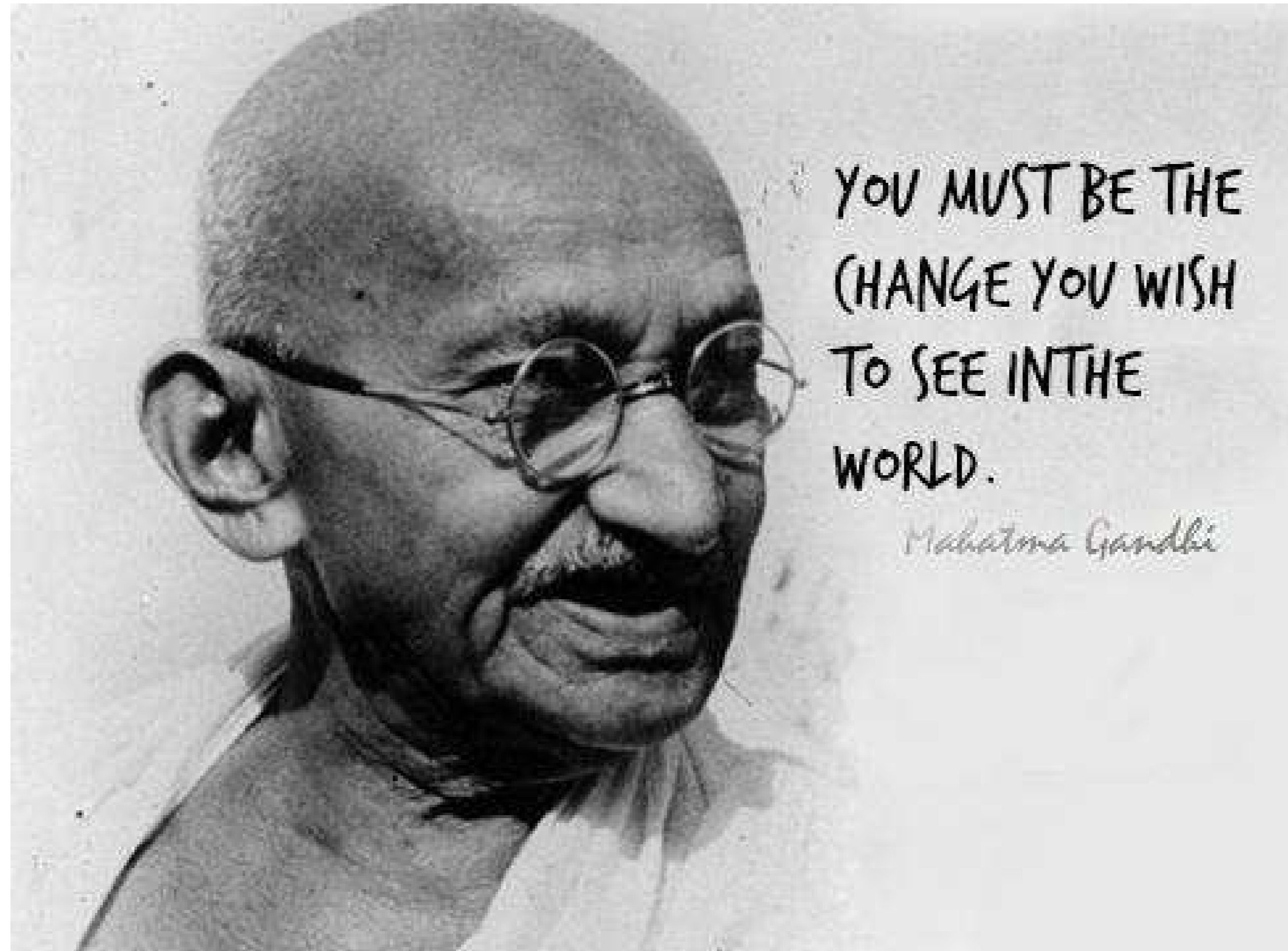
Wide Open Dreams Trailer

https://youtu.be/iFtcWA_nz08

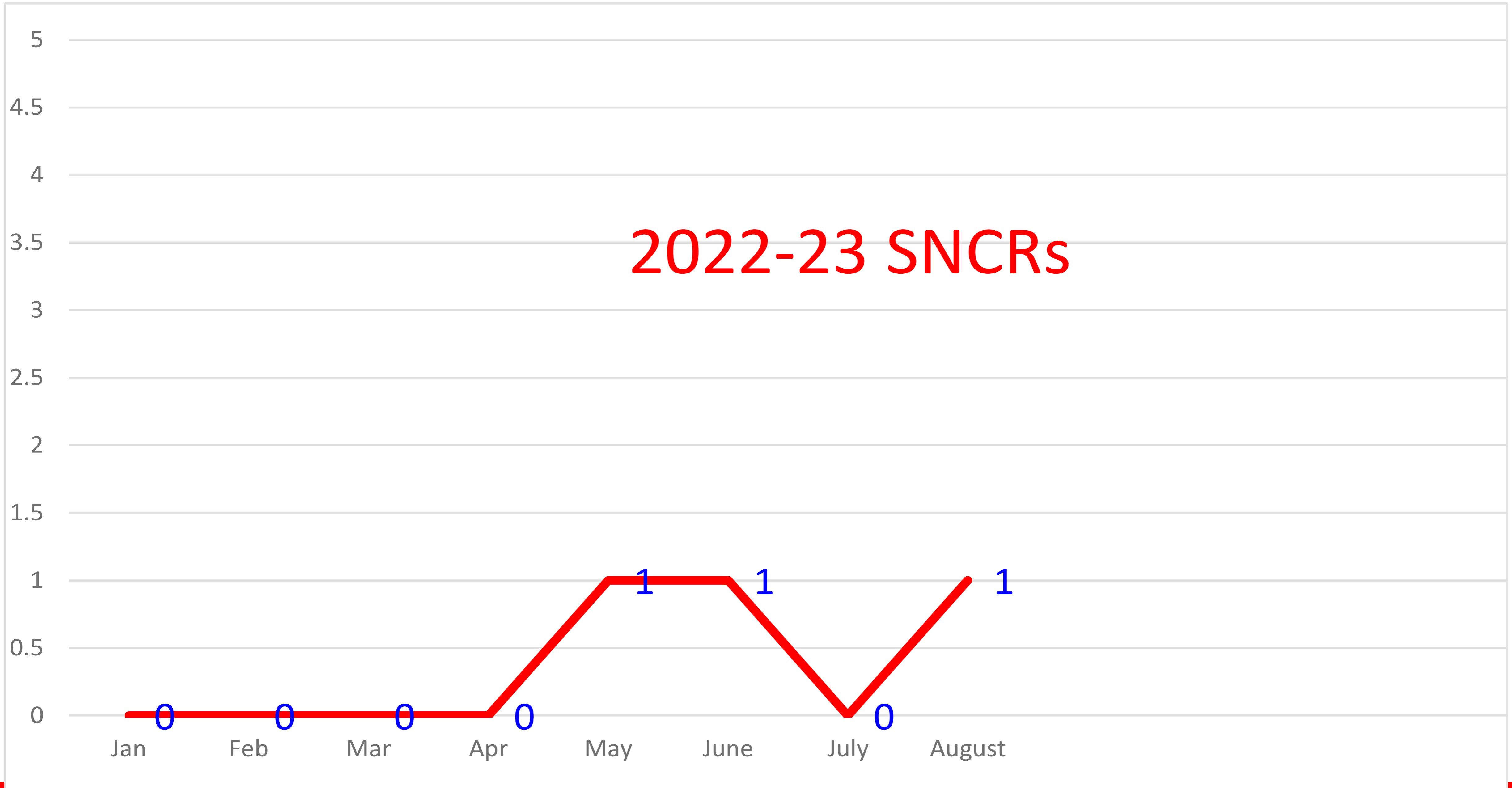


They told me yes
when everyone else said no.

APPENDIX



Supplier Non-Conformance Reports



"On Time In Full"

105%
100%
95%
90%
85%
80%
75%

Jan Feb Mar Apr May June July August

% OTIF

100%

99%

99%

100%

98%

100%

100%

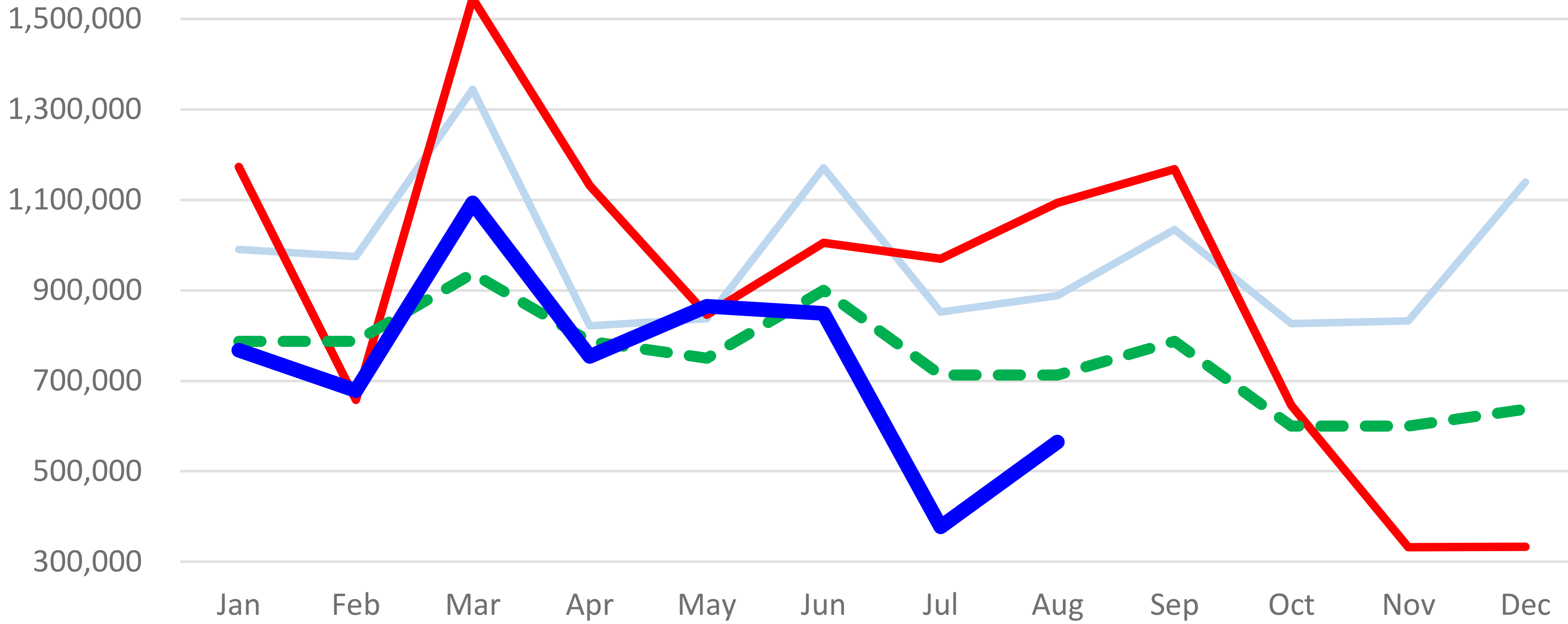
100%

Supply to
Unilever +
All others



MM lbs	Jan-Aug	Sept-Dec	Full yr
2023	<u>Ytd</u>	<u>Ytg</u>	<u>Total</u>
<i>NA</i>	3.2	1.5	4.7
<i>EU</i>	1.9	<i>0.3</i>	<i>2.2</i>
UK	0.7	<i>0.1</i>	<i>0.9</i>
<u><i>AQ</i></u>	<u>0.1</u>	<u>0.0</u>	<u>0.1</u>
<i>Total</i>	5.9	1.9	7.9

Lbs sold to B&J



— 2021 — 2022 - - - 2023 - Budget — 2023 - Actual

		MM lbs				% Volume			MM lbs	
	<u>UNILEVER</u>	<u>NA</u>	<u>Int</u>	<u>Total</u>		<u>NA</u>	<u>Int</u>		<u>Non-UL</u>	<u>Total GB</u>
Actual	2021	4.9	6.8	11.7		42%	58%		0.273	12.0
Actual	2022	4.4	6.5	10.9		40%	60%		0.378	11.3
Estimated	2023	4.7	3.2	7.9		60%	40%		0.400	8.3
<i>Projection</i>	<i>2024</i>	<i>5.0</i>	<i>2.0</i>	<i>7.0</i>		<i>71%</i>	<i>29%</i>		Tbd	Tbd
<i>Possibility</i>	<i>2025</i>	<i>5.5</i>	<i>0.5</i>	<i>6.0</i>		<i>92%</i>	<i>8%</i>		Tbd	Tbd
<i>Possibility</i>	<i>2026</i>	<i>6.0</i>	<i>0.0</i>	<i>6.0</i>		<i>100%</i>	<i>0%</i>		Tbd	Tbd

INCLUSION COMPETITION

- Although B&J is a long-term Greyston customer, Unilever also leverages most major ice cream inclusions competitors

Recently sold to Orkla of Norway



Denali – Rhino – Pecan Deluxe and Kerry are all top results when searching for "inclusions for ice cream"

Competitors square footage and storage capability is 2-5 times larger than Greyston and spread across multiple facilities

Local to B&J and a mission-based partner w/ Greyston



Key attributes across competitors:

- R&D/culinary expert is positioned as a critical member of the team, collaborating with customers and bringing new flavors to life
- Our competitors offer a wide variety of inclusions in addition to baked pieces; candy pieces, extrusions, etc.
- Lead times:
 - 3 weeks for stocked items
 - 8 weeks for an innovation
- Focus on clean, natural ingredients
- Certified Kosher, organic, etc.
- Offer inclusions in a variety of sizes and purchase options
- Decades of experience in inclusions
- Global manufacturing and distribution capabilities

EU "resiliency" partner based in Texas



NA "resiliency" partner

Sale pending to IRCA of Italy (owned by Advent Int.)



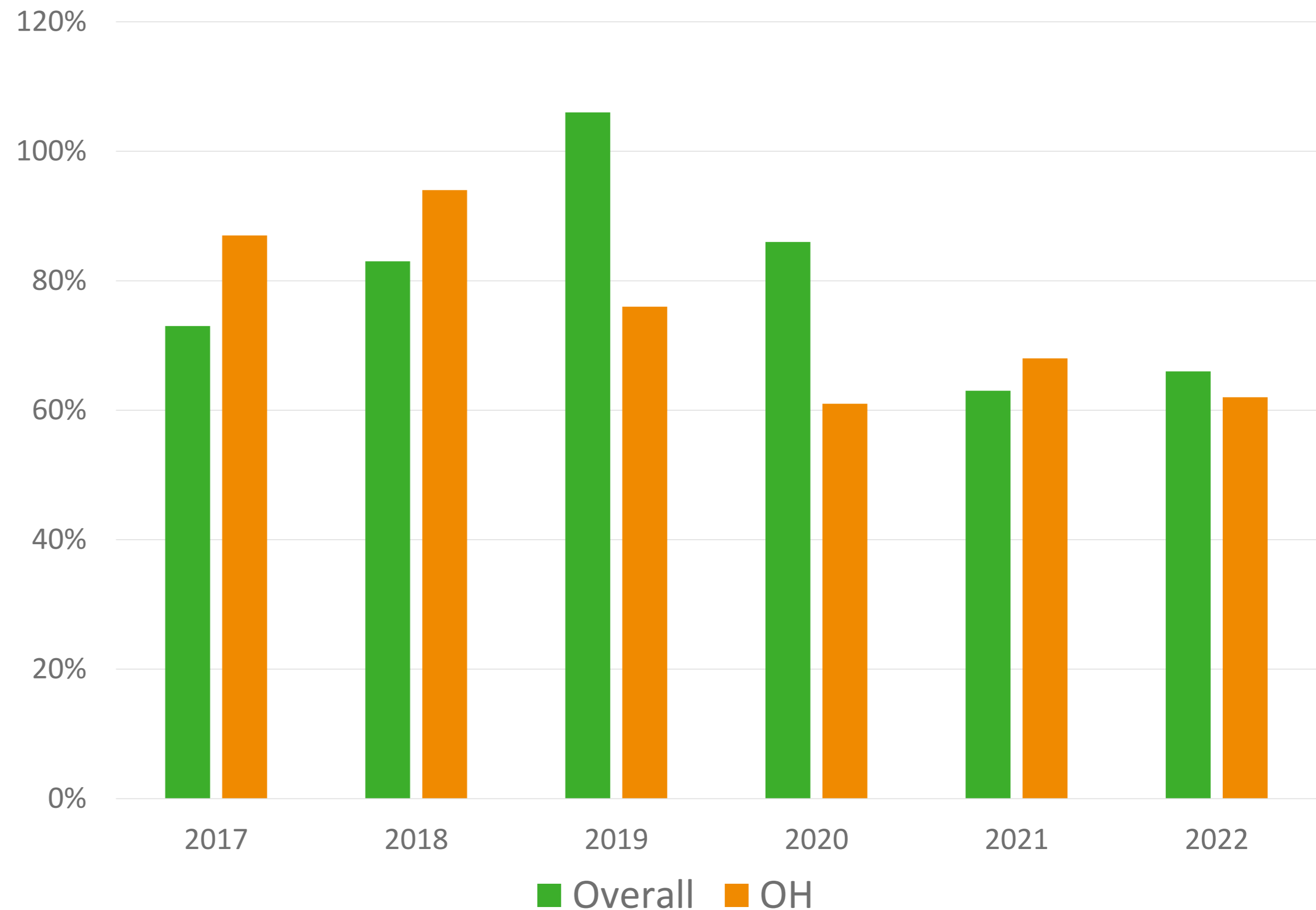
Other Greyston customers (~10%)



Bakery Open Hire Turnover

Historical Rates: 2017-2022

Year	Overall	OH
2017	73%	87%
2018	83%	94%
2019	106%	76%
2020	86%	61%
2021	64%	69%
2022	64%	61%



Note: Average commercial bakery 40-50%

Longevity of Bakery Staff

Promotions aid in retention

Tenure of all OH staff (n=82) ranges from 4 months to 20 years.

- Mean = 4 years
- Median = 2 1/2 years

Tenure of current union staff (n=65) ranges from 4 months to 20 years.

- Mean = 4 years
- Median = 2 1/2 years

Tenure of OHs promoted out of union positions (n=17) ranges from 10 mos. – 14 yrs.

- Mean = 5 years
- Median = 4 1/2 years

Breakdown of Bakery Staff

Current total headcount = 100

65% of current staff are in the union (all are OHs)

82% of current staff started as OHs

28% of all staff are in their current position based on an internal promotion

- 4% are non-OHs promoted through the ranks
- 7% are OHs promoted to Lead positions (within the union)
- 17% are OHs who have been promoted to non-union positions

49% of all non-union staff started as OHs

Encouraging Professional Growth

Current Culture of Internal Promotions

- 20 promotions in 2022
 - 1 non-OH promoted from Supervisor to Manager
 - 4 OHs promoted within the union ranks to Lead positions
 - 15 OHs promoted into non-union positions
 - 3 had already held non-union positions and were promoted up the ranks
 - 12 were promoted from union positions to non-union positions
- 2 promotions already in 2023
 - Both were union staff promoted to non-union positions

Providing a Living Wage

Earnings beyond base wages

• Average current union rate of existing staff is \$17.56	\$36,525
• Based on a 40-hour workweek, that would annualize to \$36,524.80	
• Our staff generally work four 11.5-hour shifts per week, resulting in 6 hours of OT per week for an additional \$8,218.08	<u>+ 8,220</u>
	\$44,745
• Staff earn an anniversary bonus of \$20 per year. With average tenure at approx. 4 years, that's \$80.	<u>+ 80</u>
	\$44,825
• Staff have the potential to earn a \$50 attendance bonus each month if they accrue no "points" that month, adding another \$600 per year	<u>+ 600</u>
	\$45,425
• Those who are mixers have a potential to earn \$25 per day if there are no bad bowls. Based on a 4-day workweek, this gives a potential for \$5,200 per year.	<u>+ 5,200</u>
	\$50,625
• Additionally, depending on company performance, there is a potential for all union staff to earn a quarterly bonus. While this is not guaranteed, recent quarterly bonuses have ranged from \$250 to \$370 depending on position & tenure.	<u>+ 1,000</u>
	\$51,625

What is the current Living Wage?

How Greyston compares to Westchester

- Westchester County Living Wage is currently \$20.70/hour.
- Annualized based on a 40-hour workweek, that comes to \$43,056.
- As per the previous slide, our average staff, based on a schedule of 4-days per week and the built-in OT that comes with it, earn \$44,745 per year before the addition of any bonuses.

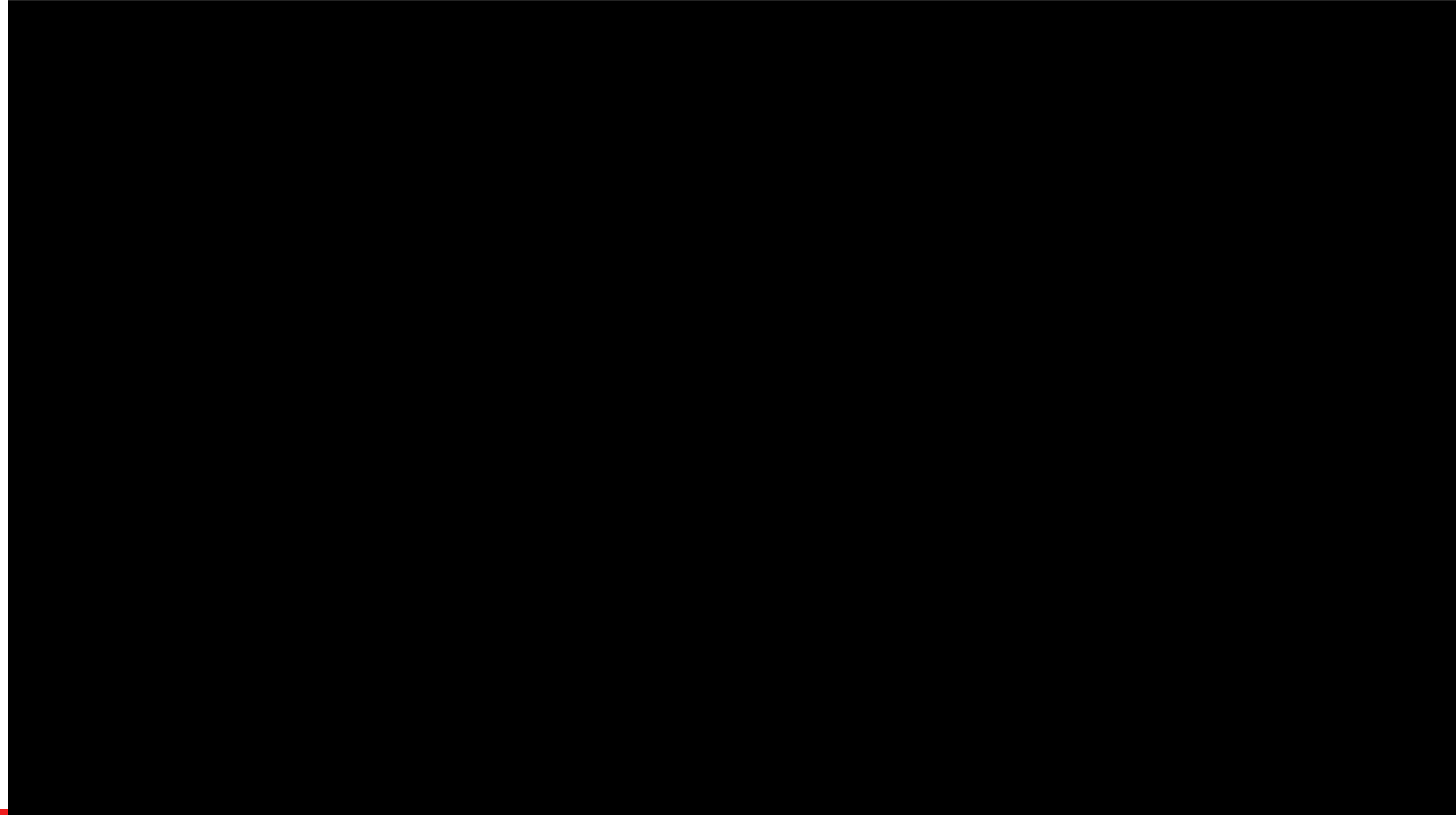
Additional Benefits

What Greyston offers beyond wages

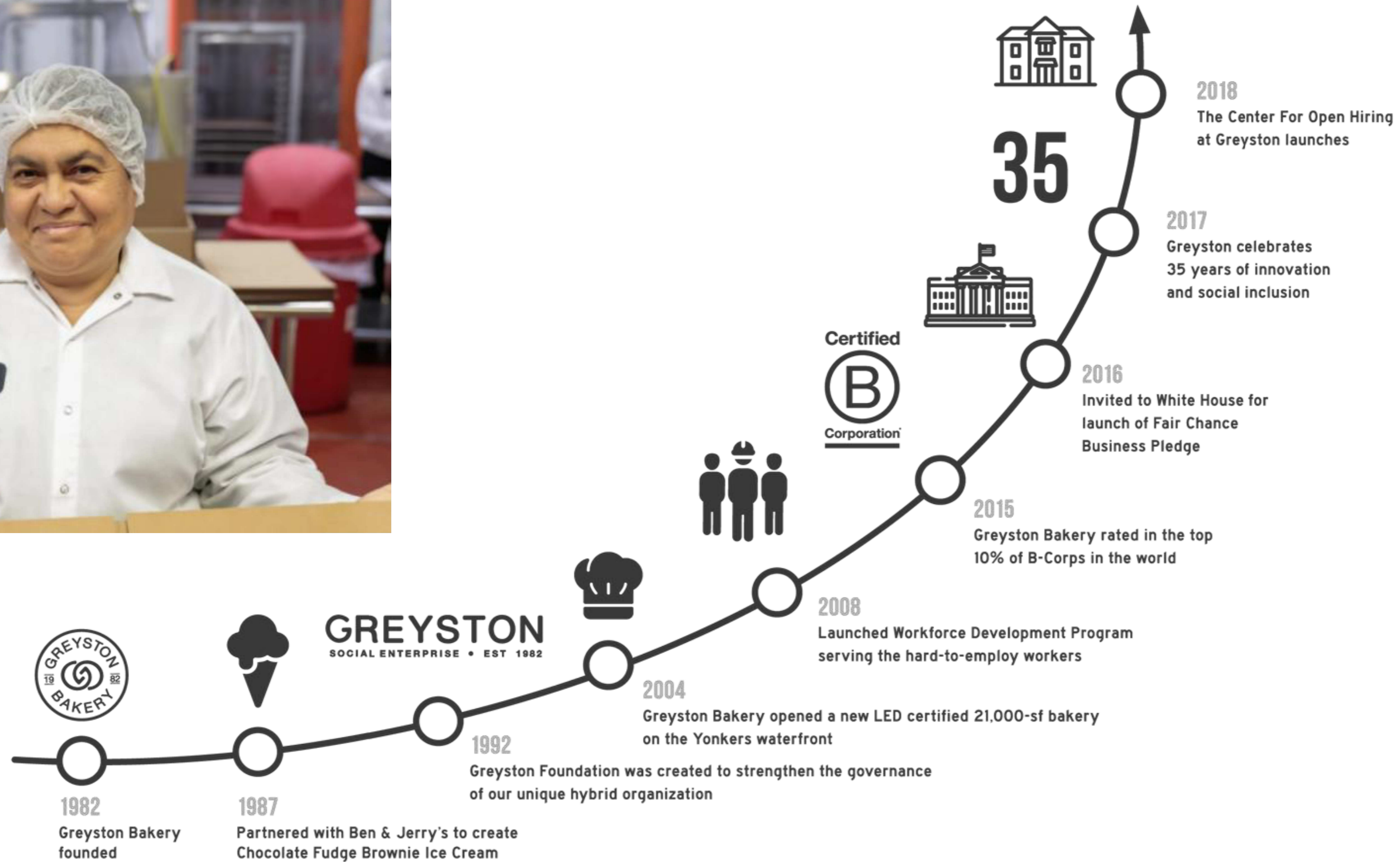
- Paid time off
 - Sick, Personal & Vacation
- Medical, dental & vision insurance
 - Subsidized at almost 90%
 - Union employees pay only \$117/month; premium is \$1,082/month
- Employer-paid Short Term Disability and Life Insurance
- 401k with match up to 4% and immediate vesting

Open Hiring Video

GREYSTON



History



Bakers on a Mission

Guiding Principles

Open Hiring

Open Hiring is a policy which offers employment opportunities regardless of education attainment, work history, or past social barriers, such as incarceration, homelessness, or drug use.

PathMaking

PathMaking is both a philosophy and a program which reflects Greyston's core belief that individuals can be supported to achieve "wholeness" (self-sufficiency) that comes from having a well-balanced, satisfying and integrated personal, spiritual, and professional life.



"I was illegal since I was a teenager. Now to be legal and working on credit, bank accounts and stuff like that, it means a lot. It feels like I am part of society now. Before, I did not feel like that." -
Dion Drew

- Open Hires face a wide range of barriers before finding Greyston, including ~ ½ previously incarcerated

- A black man born in the US after 2001 has a 33% chance of going to jail
- 59% of those formerly incarcerated are living below federal poverty level
- Individual lifetime earnings decreases 40% with a criminal record
- 700,000 inmates released annually
- 60-75% of people can't find work within first year out of jail

We don't hire people to bake brownies, we bake brownies to hire people





Center for Employment Opportunities (CEO)

ceo

CEO Overview

ceo

Welcome!





Center for Employment Opportunities





ceo

Mission and Vision

CEO provides immediate, effective, & comprehensive employment services exclusively to individuals who have recently returned home from incarceration.

Our vision is that anyone with a criminal record who wants to work has the preparation and support needed to find a job and stay connected to the labor force.



The Challenge: A National Crisis

The **U.S.** is home to **5%** of the **World's Population**

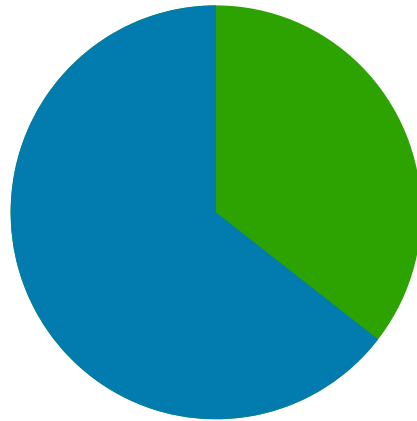


25% of the **World's Prisoners**



600,000+ people are released from incarceration every year

Research indicates that within 3 years, close to **70%** will return.



1 in 5 Americans (approx. 68 million) has a criminal record.

Of the currently incarcerated, **more than 50% are parents** of children under 18; **20% are young adults** (ages 18-25).

Over 800,000 and 3.7 million individuals are currently on parole and probation respectively.

SOURCES: Lucius Couloute and Daniel Kopf, "Out of Prison & Out of Work: Unemployment among formerly incarcerated people," Prison Policy Initiative (July 2018); The Sentencing Project, "Trends in U.S. Incarceration," The Sentencing Project (June 2017).; Community Legal Services of Philadelphia, Half in Ten "Americans with Criminal Records". The Sentencing Project, 3 Dec. 2014; KIDS COUNT, "A Shared Sentence: The Devastating Toll of Parental Incarceration on Kids, Families, and Communities," The Annie E. Casey Foundation (April 2016).; Pete Wagner and Wendy Sawyer, "Mass Incarceration: The Whole Pie 2018," Prison Policy Initiative (March 14, 2018).



CEO's National Impact

CEO's National Footprint: 31 Sites in 12 States

CALIFORNIA

Fresno
Los Angeles
Marin
Oakland
Riverside
San Bernardino
San Diego
San Jose
Sacramento
Solano

COLORADO

Colorado Springs
Denver

GEORGIA

Atlanta

KENTUCKY

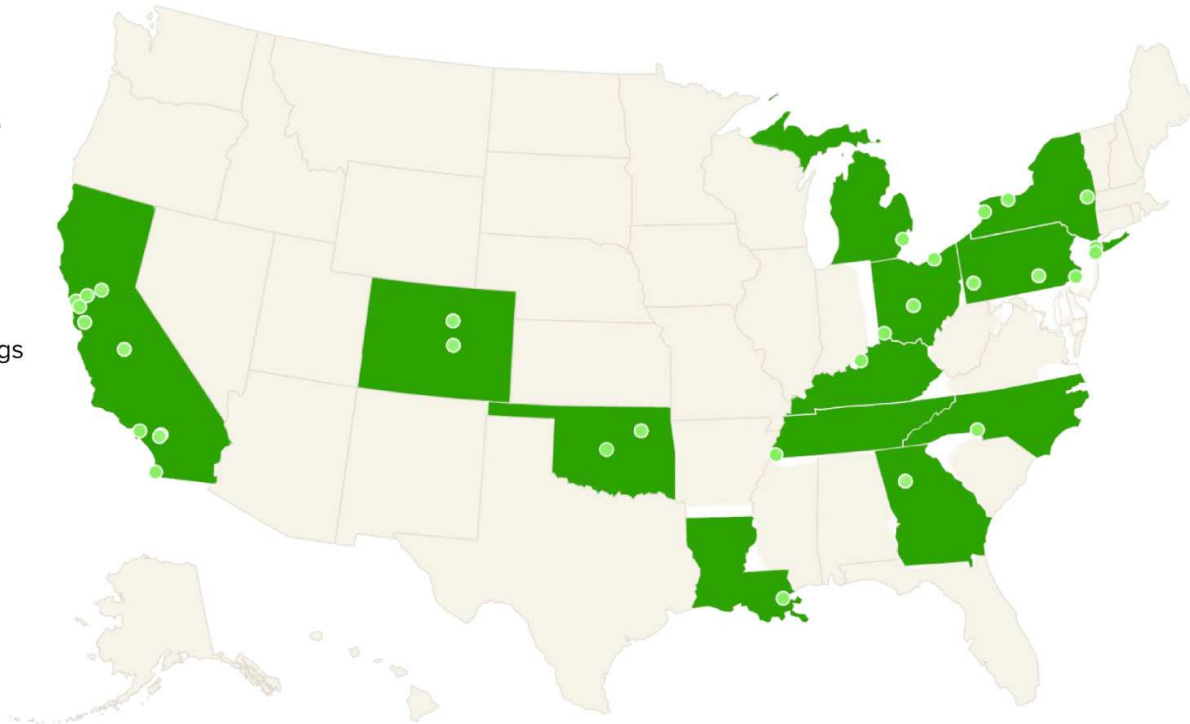
Louisville

LOUISIANA

New Orleans

MICHIGAN

Detroit



NEW YORK

Albany
Buffalo
Bronx
New York City - HQ
Rochester

NORTH CAROLINA

Charlotte

OHIO

Cincinnati
Cleveland
Columbus

OKLAHOMA

Oklahoma City
Tulsa

PENNSYLVANIA

Harrisburg
Philadelphia
Pittsburgh

TENNESSEE

Memphis



Model + Benchmarks



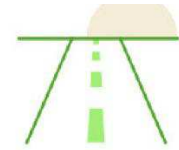
+



+



+



Job-Readiness
Training

Transitional
Employment

Job Coaching &
Placement

Retention Services
for One Year

Prepares and trains individuals to reenter the workforce.

Provides immediate work experience with daily pay.

Connects talented employees with quality employers.

Provides ongoing support to ensure participants succeed.



ANNUAL BENCHMARKS

7,300+ Enrollments

3,700+ Job placements

550+ Participants working on CEO work crews daily

150+ Transitional work crews

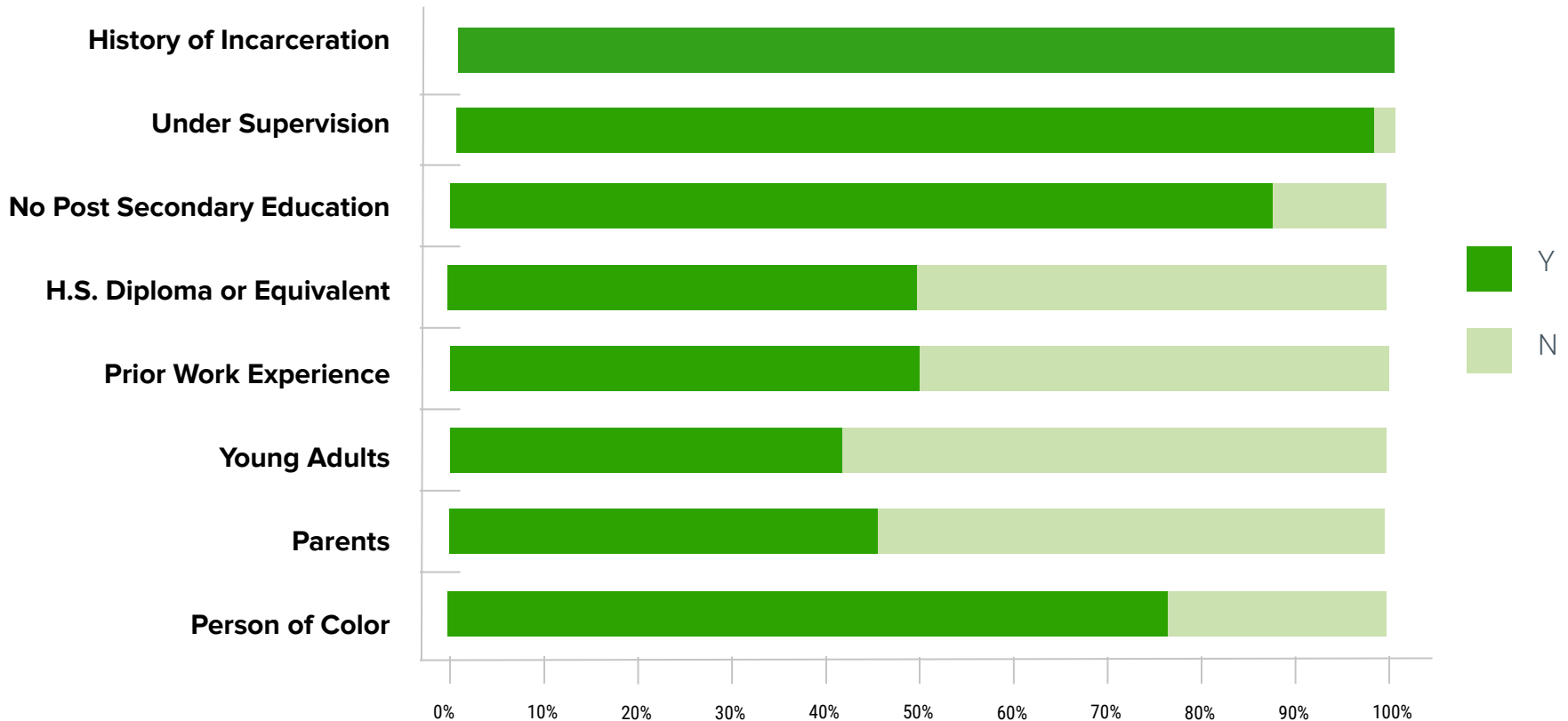
FY21 Data



Serving High Need Individuals

CEO reaches individuals immediately after release from incarceration, at their most vulnerable time.

Our participants face multiple barriers to entering the labor force.



FY18 Data

ceo

Mission Measurement



Accountability to Mission

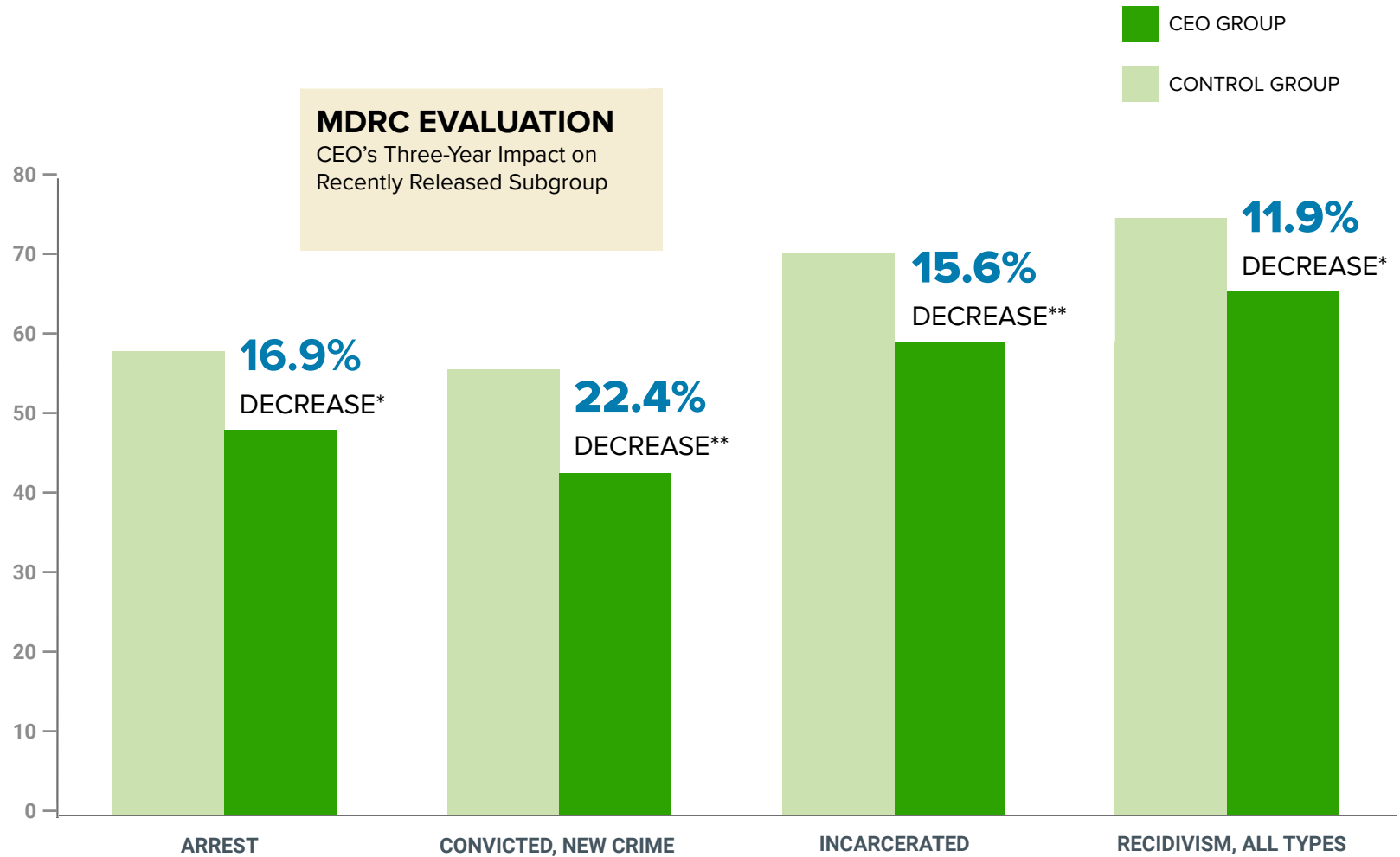
Performance & Quality Monitoring:
From hitting goals to making sense



Constituent Feedback:
From working for to working with

Program Evaluation:
From evidence based to evidence generating

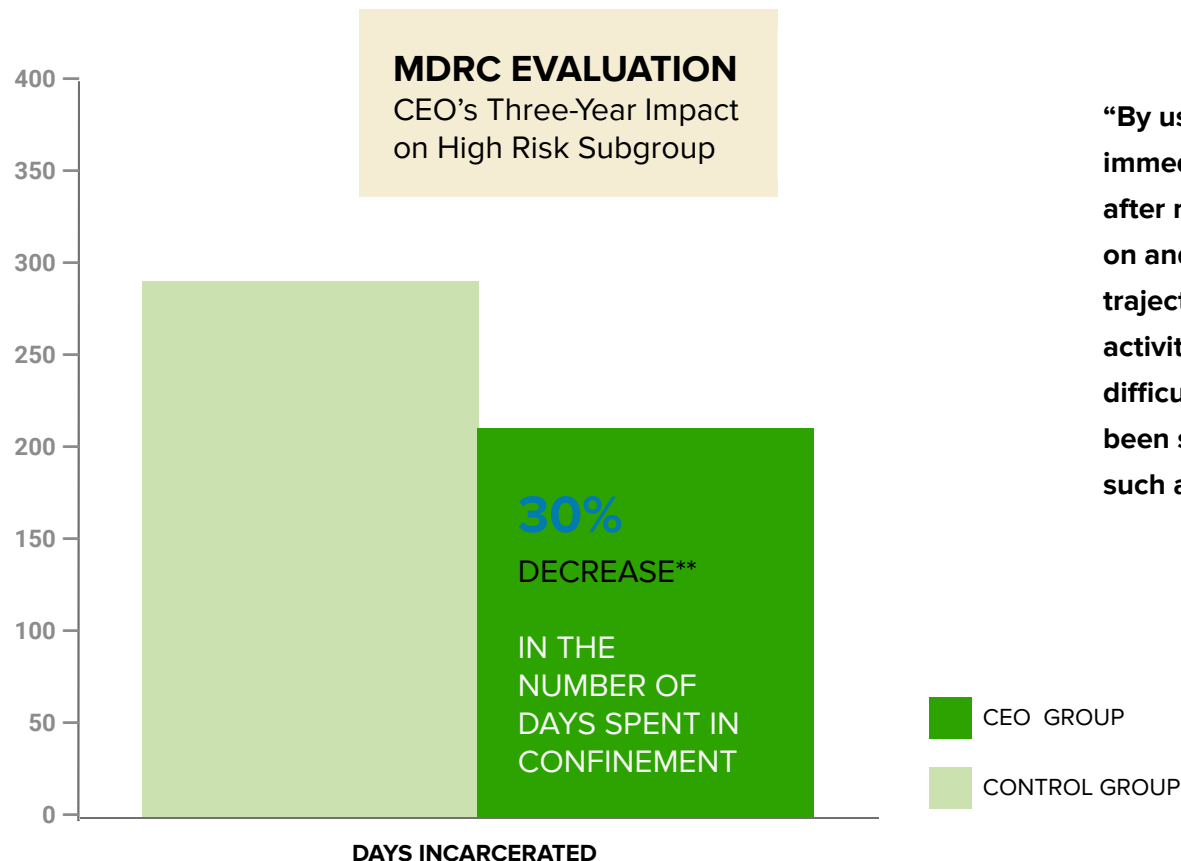
ceo Impact & Evidence



SOURCE: MDRC (2012). *More Than A Job: Final results from the evaluation of the Center for Employment Opportunities (CEO) Transitional Jobs Program*. OPRE Report 2011-18. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.



Fewer Days Incarcerated



“By using employment as an immediate engagement strategy after release, CEO intervened early on and placed people on a different trajectory, deterring future criminal activity. Reductions in recidivism are difficult to achieve and have rarely been seen in rigorous evaluations such as this one.” MDRC

Asterisk indicates statistical significance (i.e. the likelihood the impact is due to chance) — *10 percent — **5 percent

SOURCE: MDRC (2012). *More Than A Job: Final results from the evaluation of the Center for Employment Opportunities (CEO) Transitional Jobs Program*. OPRE Report 2011-18. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.



Impact: Increase Employment

DCJS Combined Outcomes
from CEO NYC, Buffalo, and Rochester



■ CEO Participants
■ Comparison Group

DCJS Evaluation: CEO Labor Outcomes 2010-2012

Taxpayer Savings

Because CEO focuses exclusively on mid- to high-risk populations, savings double.

FULL STUDY SAMPLE SAVINGS

\$2.10 saved

FOR EVERY

\$1 spent

on CEO services

That adds up to

\$4,000

saved yearly per taxpayer.

HIGH RISK + RECENTLY RELEASED SUBGROUP SAVINGS

\$3.30 saved

FOR EVERY

\$1 spent

on CEO services

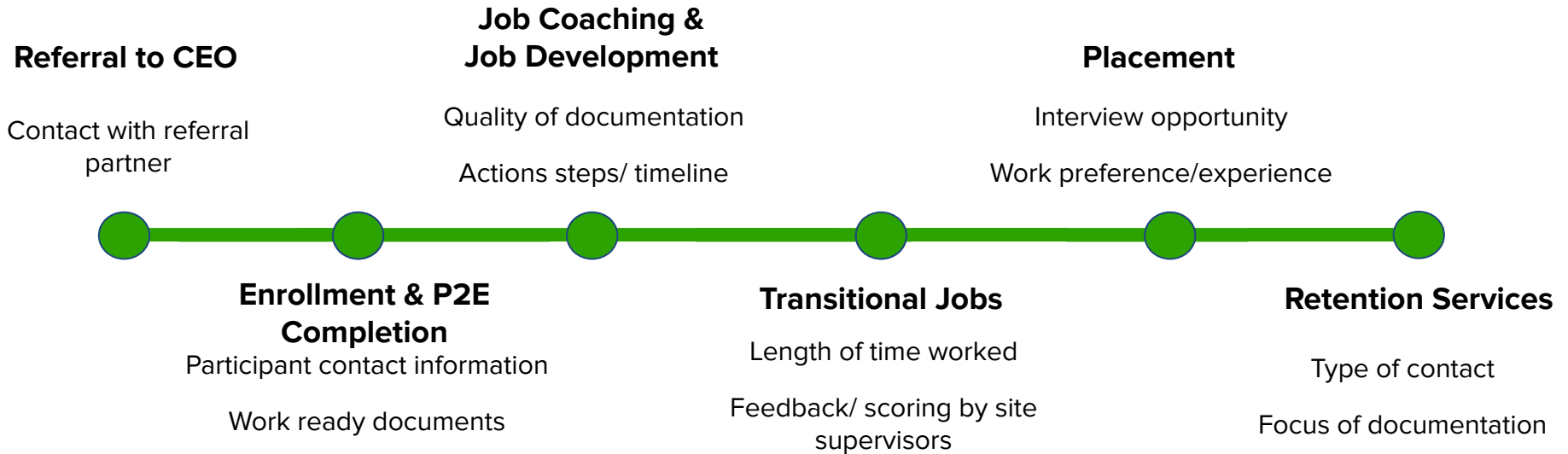
That adds up to

\$8,300

saved yearly per taxpayer.



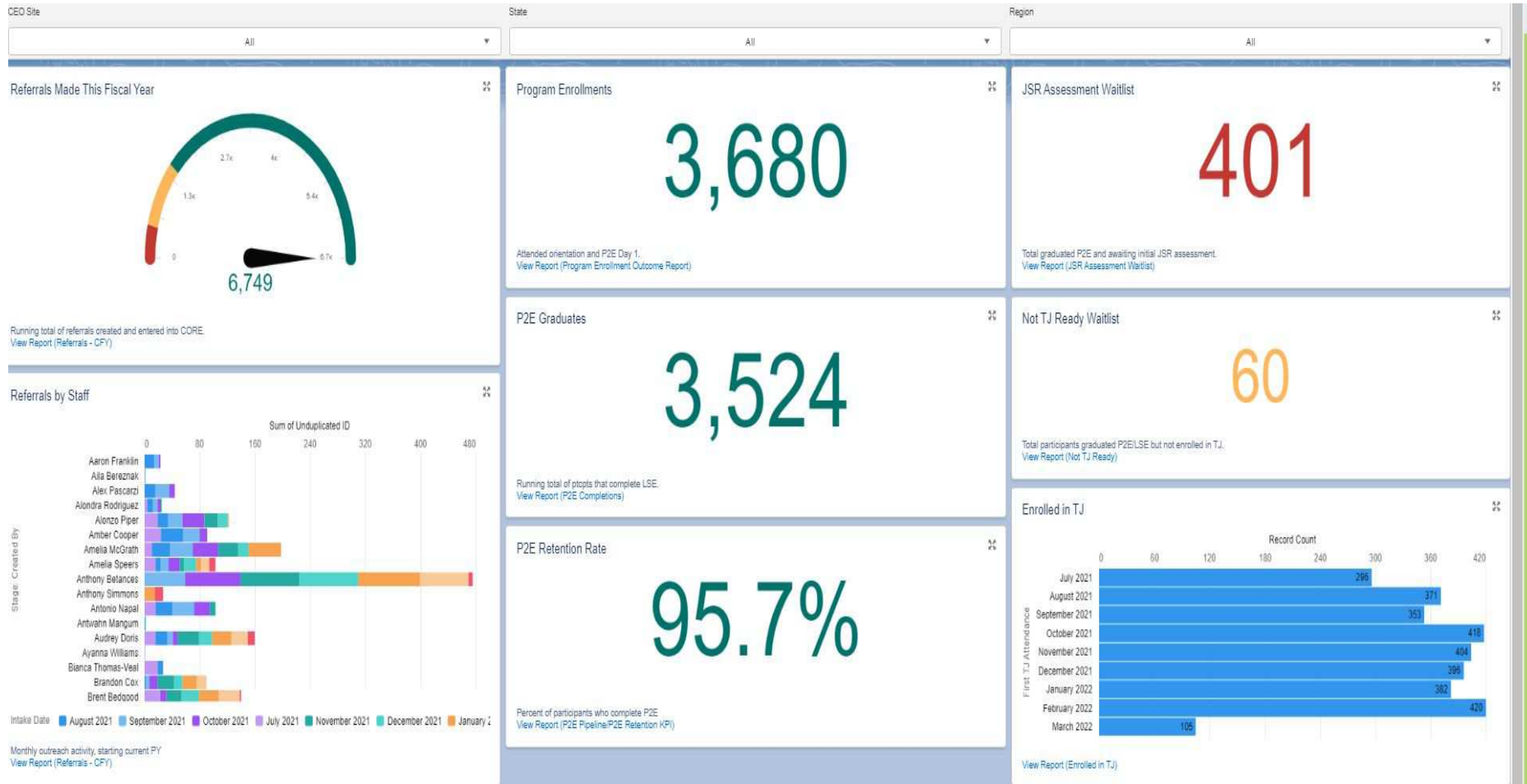
Quality Indicators At All Stages



[tcp Link](#)



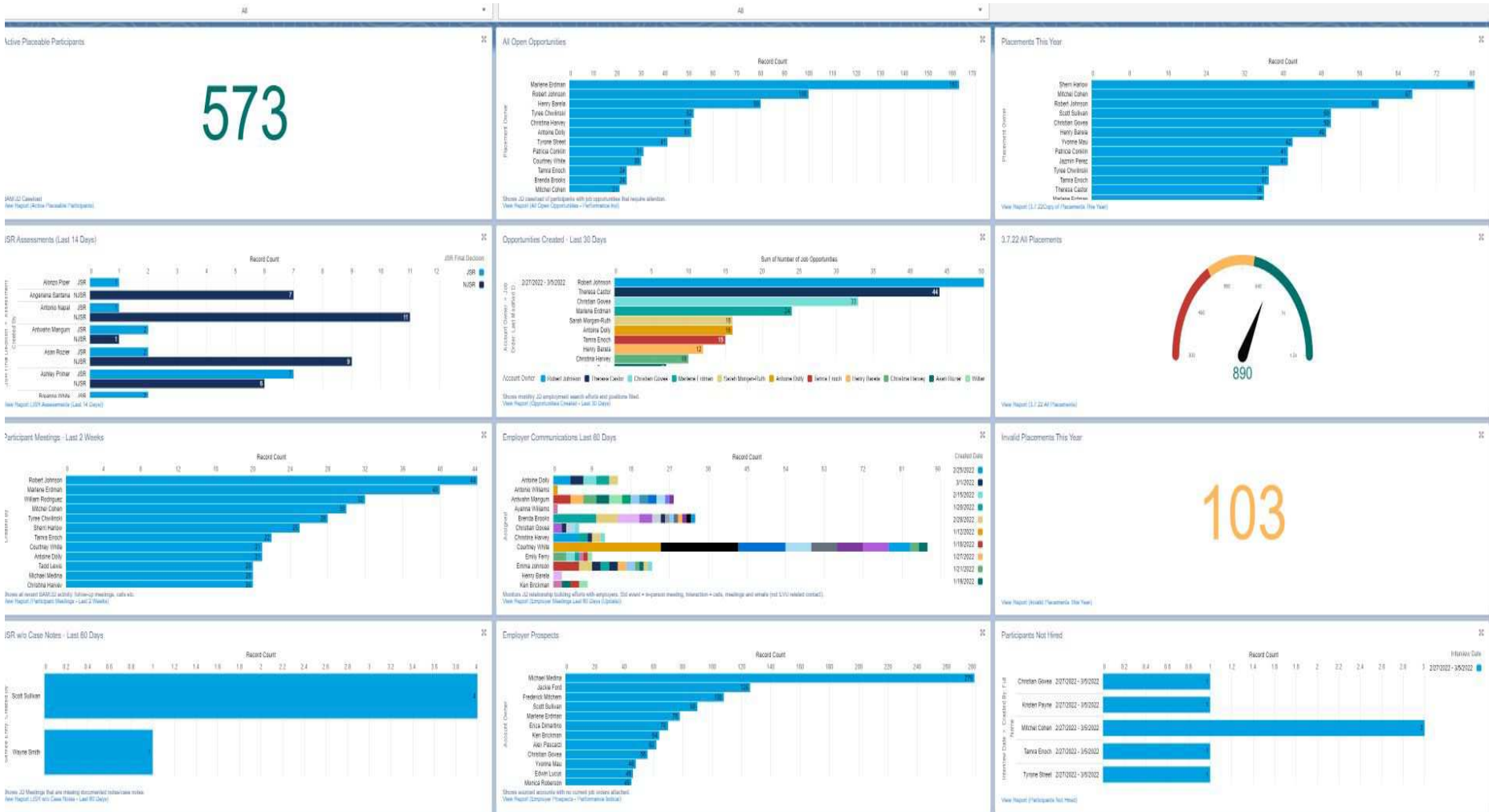
Performance Management



[Link](#)



Performance Management



[Link](#)



Participant Feedback



SMS Text Surveys



Focus Groups



1 on 1



Digital App



Anonymous
Tablet Survey



CV Project Theory of Change

If CEO:

- ❑ **Collects high quality feedback** from participants consistently, and
- ❑ **Closes feedback loops** through routine dialogue and inquiry, and
- ❑ **Responds to feedback** in a timely, flexible, and appropriate manner.

THEN:

- ❑ Participants will **feel heard** and levels of trust in CEO will increase,
- ❑ Participant levels of **program engagement** will rise,
- ❑ Participant **vocational outcomes** will improve.

**On a scale of 0-10,
how likely is it that you
would recommend CEO to
a friend or family member?**

**On a scale of 1-5,
how prepared do you
feel to begin work?**



**Does CEO meet
your needs on a
regular basis?**

**What is the most
challenging part
about getting a
full-time job?**

Thank you!

Cynthia Brackett, cbrackett@ceoworks.org

Generalkonsulatet i New York



DANMARKS GENERALKONSULAT
New York

GENERALKONSULATET I NEW YORK

Præsentation for Københavns Kommunes Beskæftigelses- og Integrationsudvalg, 13. oktober 2023
v/Jens-Jacob Simonsen, Martine Gram Barbry, Thomas Jørgensen og Maiken Derno

AGENDA

Danmark stærkt repræsenteret i USA

USA er afgørende for dansk erhvervsliv

Økonomiske og politiske udsigter

Industripolitisk onshoring

Landskabet i New York

Vores arbejde med eksport-, investerings- og kulturfremme

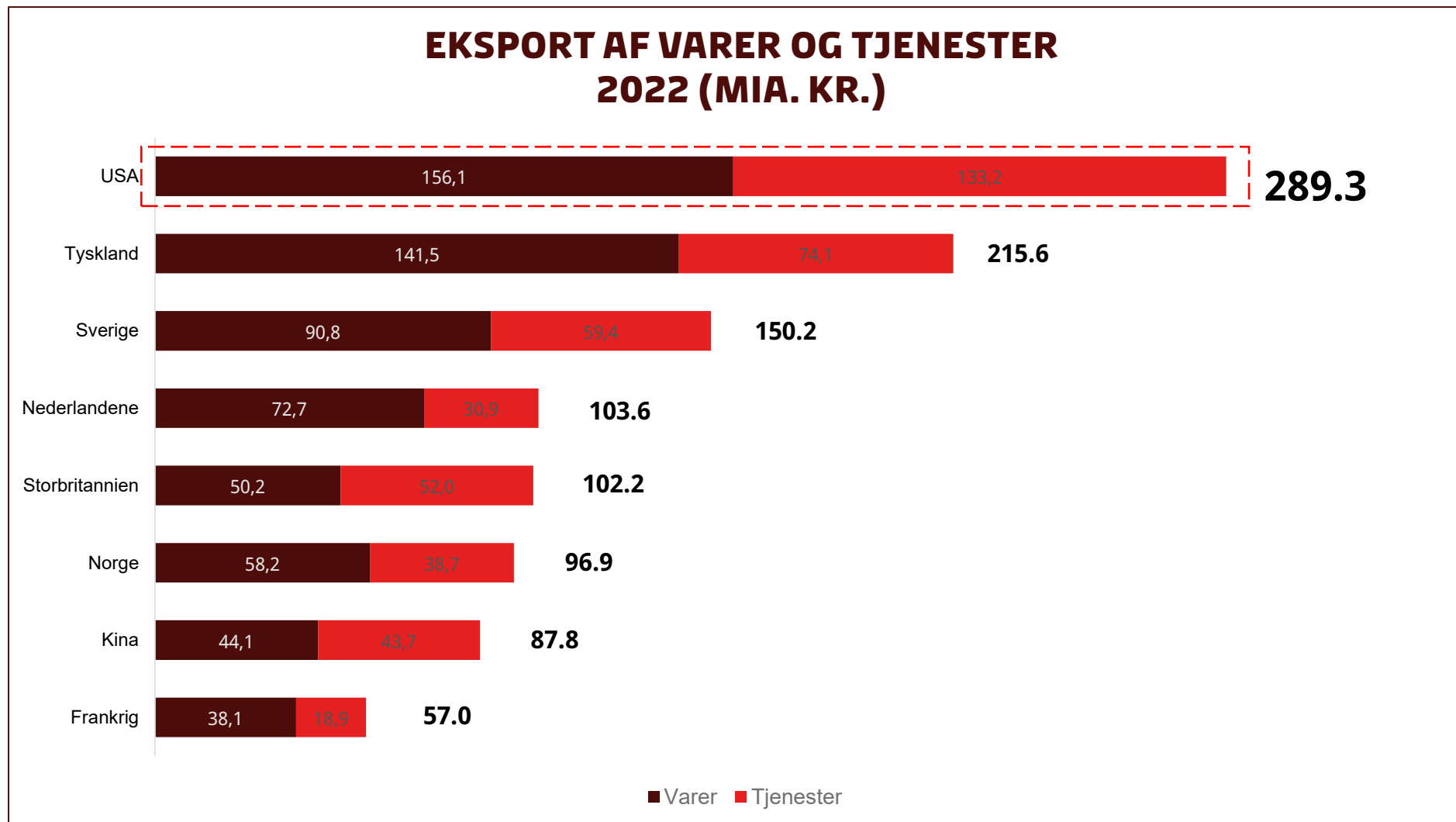


DANMARK STÆRKT REPRÆSENTERET I USA

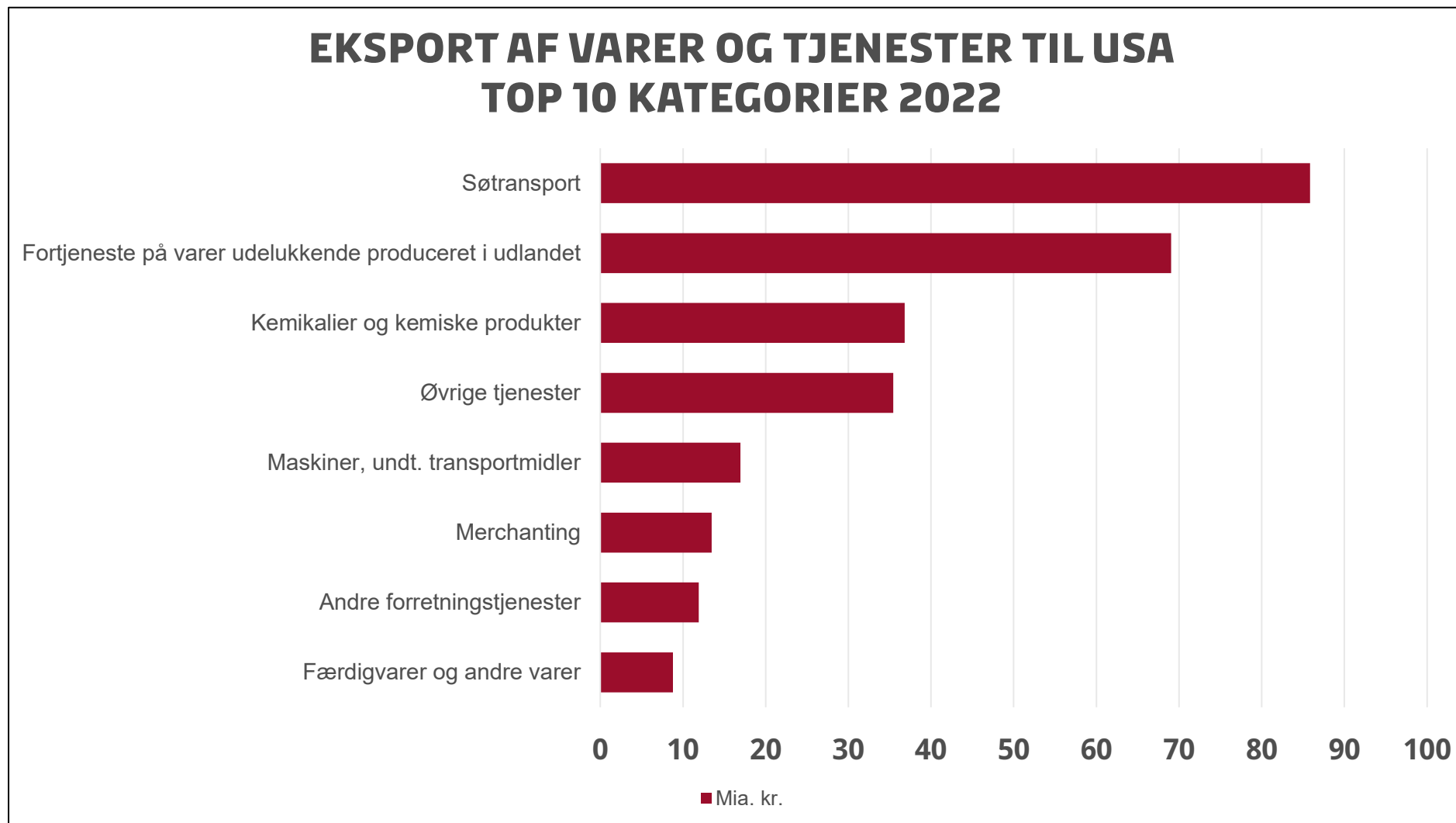
- DENMARK HOUSE: GKL og FN-missionen
 - TC og InvestinDK
 - Regional matrixorganisation
 - Public Diplomacy og Kultur
 - Konsulær bistand & Visumhub
 - Økonomisk & adm. servicecenter



USA: DANMARKS STØRSTE EKSPORTMARKED

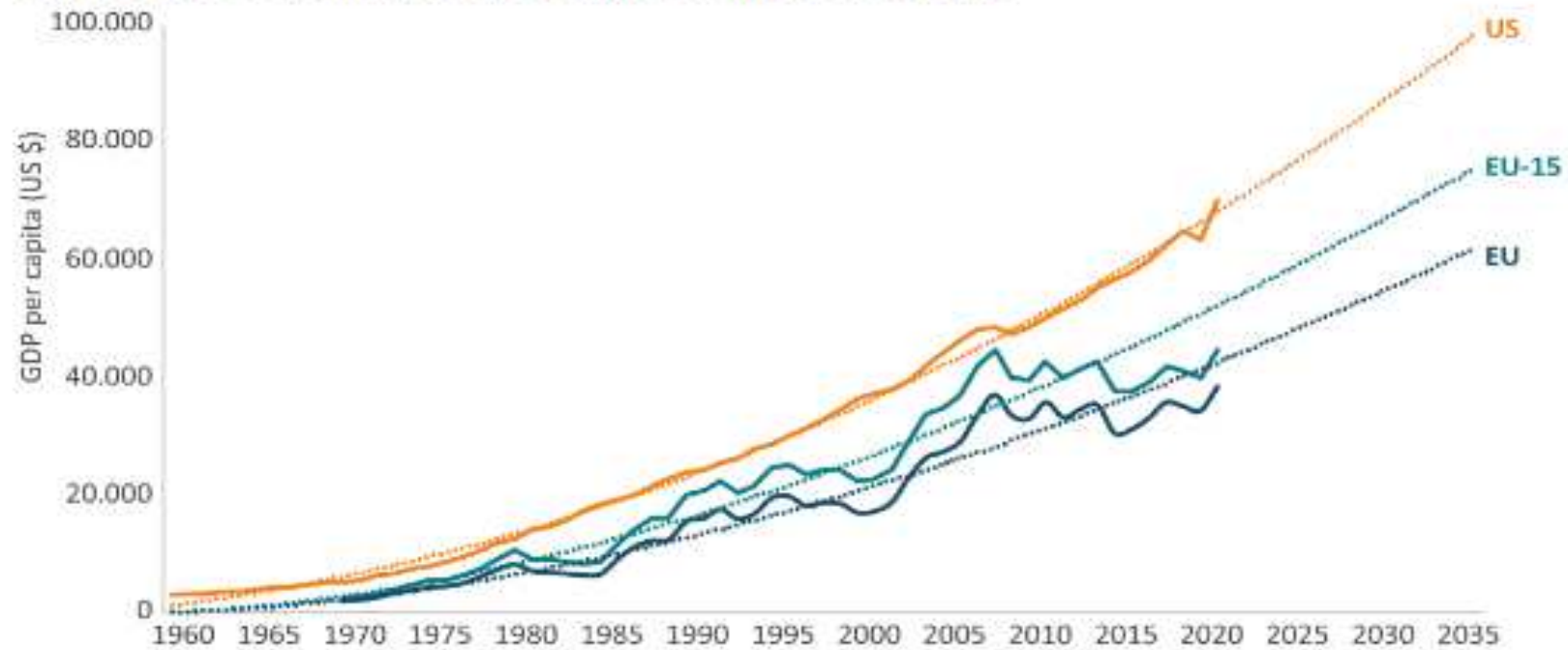


DE VIGTIGSTE EKSPORTKATEGORIER



VÆKSTGAP I BNP PER CAPITA EU VS. USA

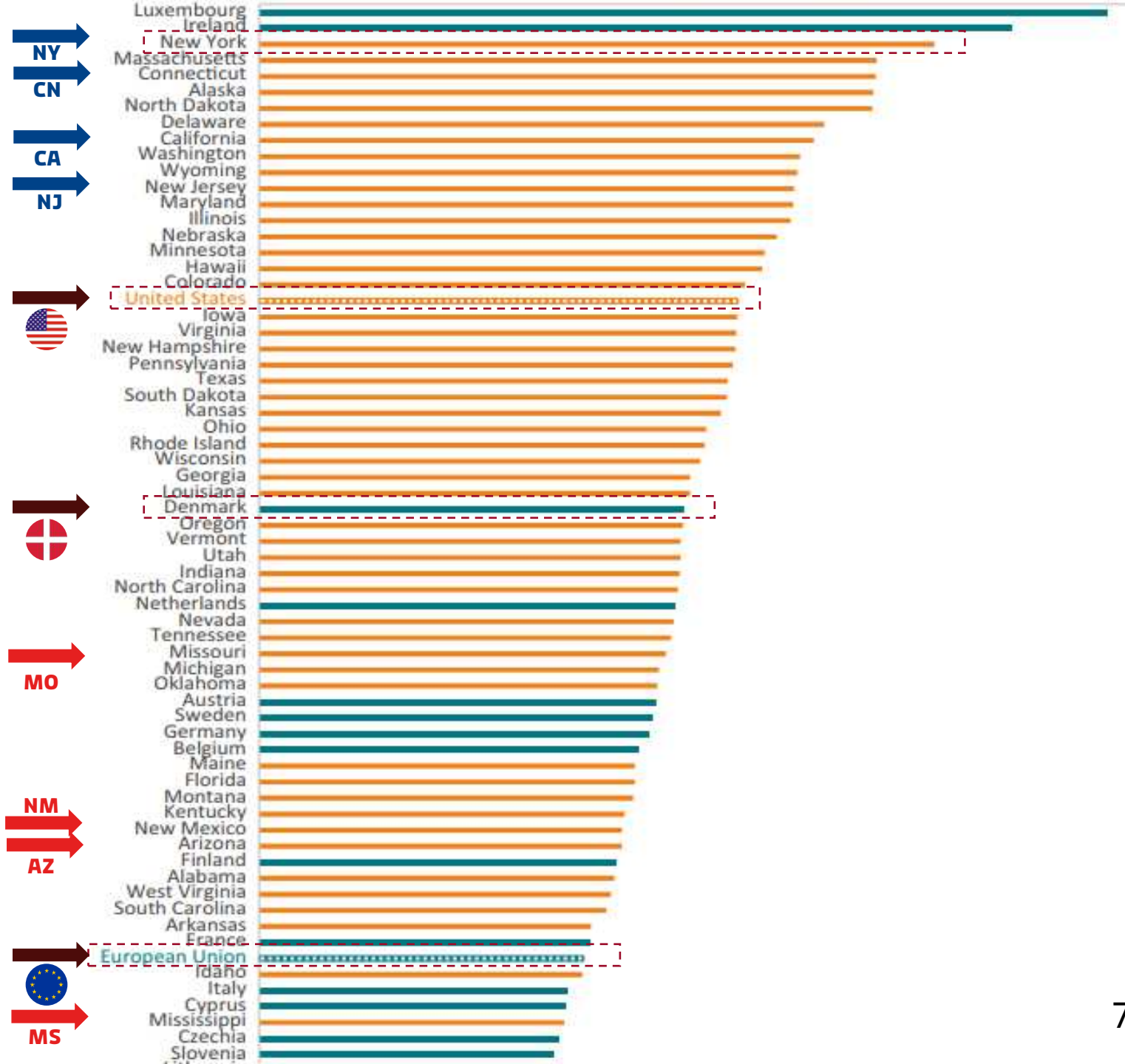
FIGURE 8: DEVELOPMENT OF EU AND US GDP PER CAPITA



Source: World Bank, author's calculations.

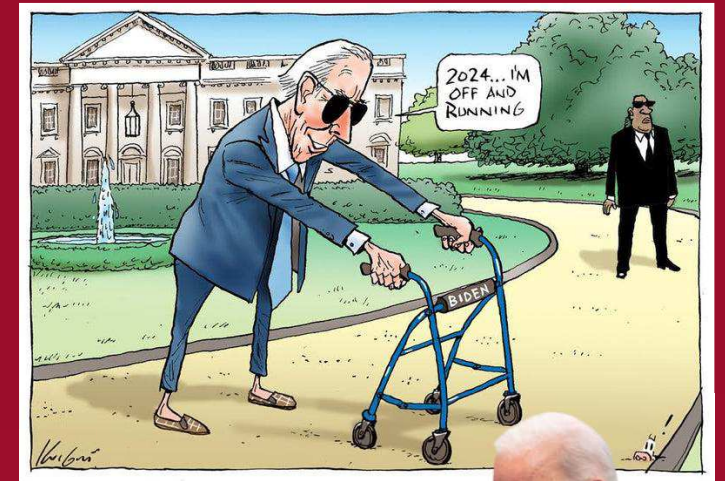
48 US STATER HAR EN HØJERE KØBEKRAFT PER INDBYGGER END EU (28 HØJERE END DK)

Note: Købekraft korrigerer indkomsten for forskelle i prisniveau. Ex: hvis den samme relevante varekurv (med gældende valutakurs) koster 50% mere i New York end i København beregnes "købekraftsindkomsten" i New York i fht. København ved at reducere New York indkomsten med 50%





PRÆSIDENT- OG MIDTERMVALG I 2024



VALGKAMPTEMAER

Leveomkostninger/
inflation

Stormen på kongressen
og retssagerne mod
Trump

Socialpolitik, herunder
Medicare

Illegal immigration

Værdipolitik: abort,
ESG, grøn omstilling,
etc.

Udenrigspolitik: handel,
Kina, Ukraine, etc.

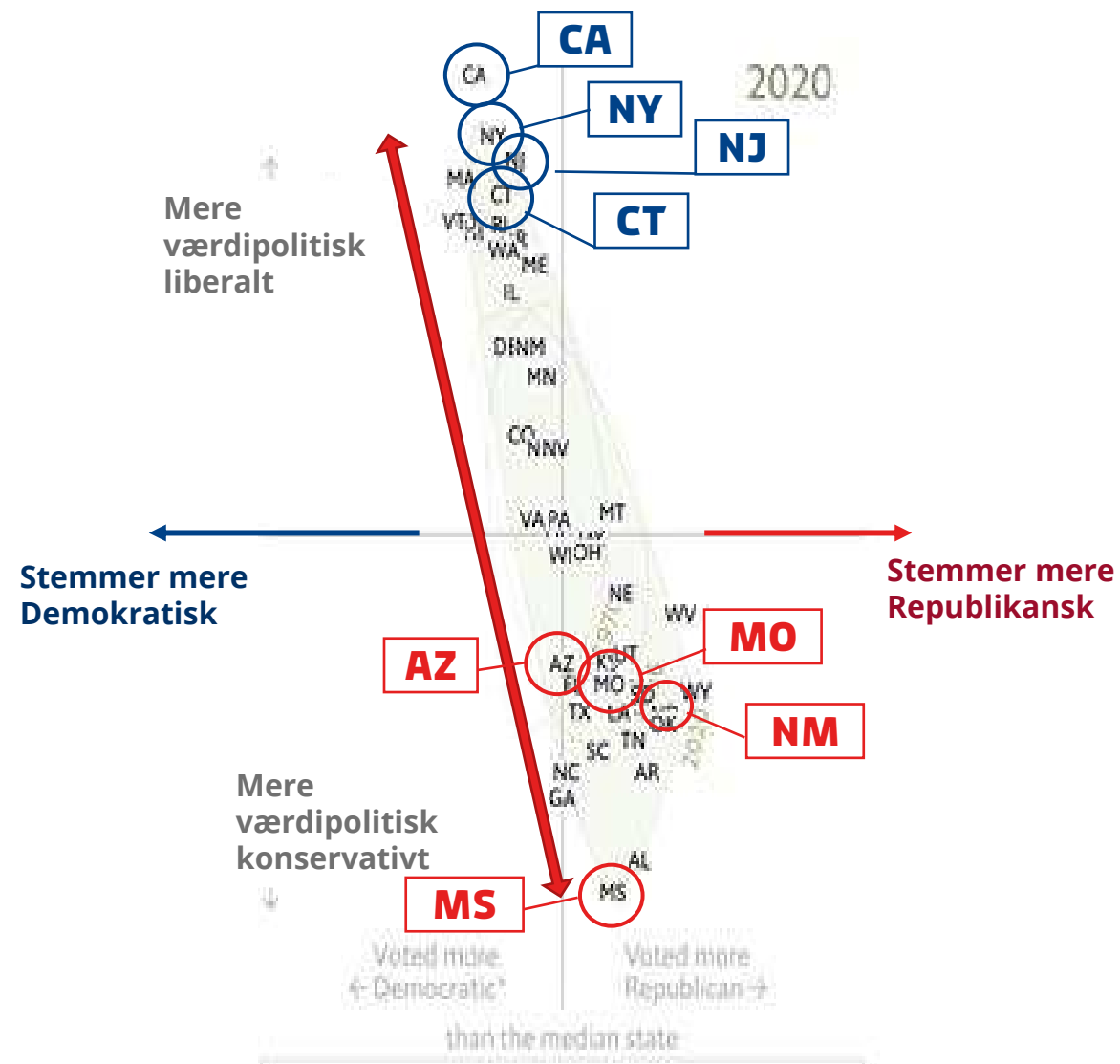
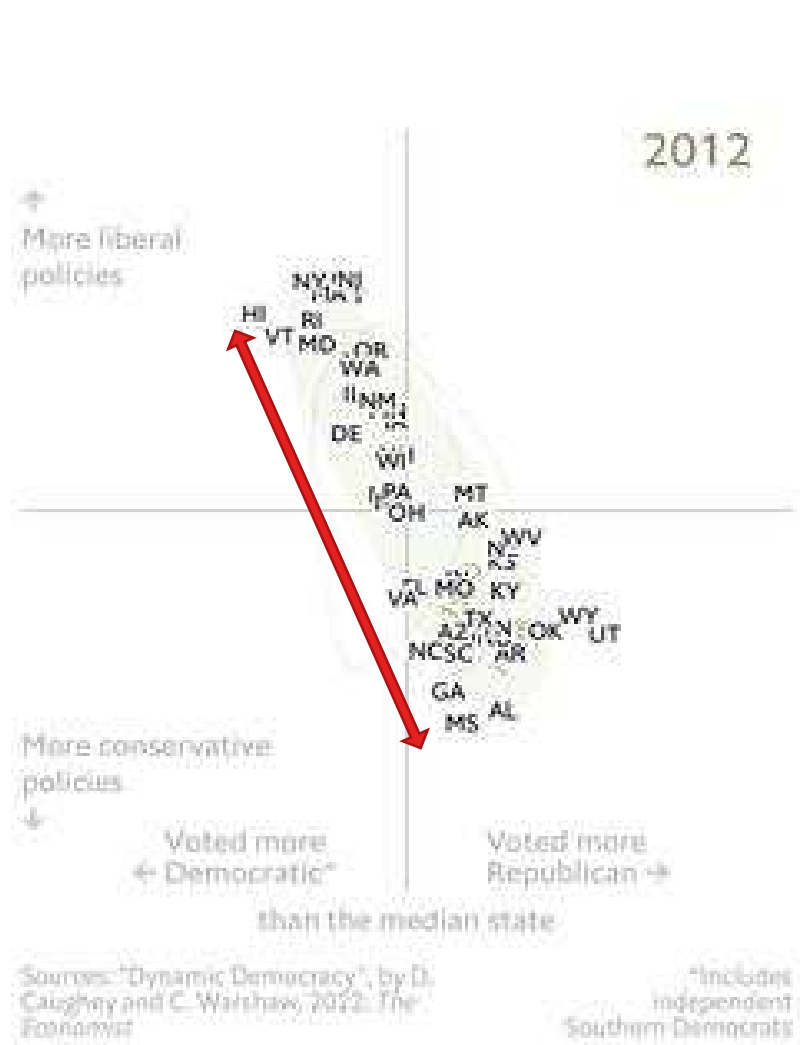
CAUTION

Smuggling and/or illegal immigration are common in this area due to the proximity to the international border.

Please be aware of your surroundings at all times and do not travel alone in remote areas.

Do not report suspicious activity

VÆRDIPOLITISK POLARISERING





INDUSTRIPOLITISK DERISKING/ DECOUPLING, ONSHORING

**INFRASTRUC-
TURE ACT
\$550 MIA.**

**IRA
\$400-800 MIA.**

**CHIPS AND
SCIENCE
ACT
\$280 MIA.**

Kilde: The White House, 2022

LANDSKABET I NEW YORK

Målsætninger

Prioritering af økonomisk vækst
Lov og orden
Velfungerende offentlig service

ERHVERVSLIV

Life Science
Maritime
Finans & Tech
Universiteter & Foundations
Kultur & Creative

POLITIK

Demokratisk styret, Eric Adams
Demokraterne: 53%

Aktuelt dilemma: Hjemløse &
Illegale immigranter ("right to
shelter")

VÆRDIPOLITIK

Grønt værdisæt
Pro-fagforeninger
Progressive Off. Indkøbskriterier
Relativt høj beskatning

GENERALKONSULATETS OMRÅDER

Udenrigs- og sikkerhedspolitisk strategi

INVEST IN
DENMARK

TRADE
COUNCIL

KULTUR &
PUBLIC
DIPLOMACY

INVEST IN DENMARK

FOKUSINDUSTRIER- OG SEKTORER



Life science

Pharma & Biotech | MedTech
| Medical cannabis | Digital
Health



Food

Biosolutions | Food
Ingredients | Plant-based



Cleantech

Green data | Energy Storage |
Green Maritime | Wind Power
| Power to X | Carbon Capture,
Utilisation & Storage



Tech

Robotics | Software
Development | Quantum |
Artificial Intelligence |
Metaverse | Fintech

SAMARBEJDE PÅ TVÆRS AF NORDAMERIKA OG DANMARK



TOTALT	61
DANMARK	34
KØBENHAVN	24
DANSKE REGIONER KOLDING, AARHUS, ODENSE, SILKEBORG, AALBORG	9
GLOBALT	27
NORDAMERIKA NEW YORK, SILICON VALLEY, TORONTO	10
EUROPA LONDON, PARIS, OSLO, MÜNCHEN	7
ASIEN TAIPEI, SHANGHAI, BANGALORE, SINGAPORE, TOKYO	11

SERVICE OG RÅDGIVNING

GRATIS OG FORTROLIGT

- Information om danske rammevilkår: arbejdsmarked, erhvervsliv, forretningskultur
- Skræddersyet rådgivning fra sektor-eksperter
- Benchmark analyser
- Kontakt til potentielle forretningspartnere, researchcentre, universiteter, offentlige institutioner og private aktører
- Fact-finding tours til Danmark
- Vejledning og rådgivning i oprettelse af selskab eller forskning i Danmark
- Opfølgning og rådgivning i at vækste aktiviteter i Danmark

VÆRDISKABELSE FOR DANSK ØKONOMI OG STYRKEPOSITIONER

- Tiltrækker kapital, know how, forskning, udvikling og talent, der bidrager til at styrke dansk økonomi
- Fremmer danske styrkepositioner, videnscentre og uddannelse
- Skaber arbejdspladser og øger ekspertise på det danske arbejdsmarked
- Fokus på grøn omstilling og bæredygtighed

INVEST IN DENMARK
LIFE SCIENCE, HERUNDER KLINISKE STUDIER



SUSTAINABILITY SUMMIT

Sustainable Solutions to Global Challenges



Time	Day 1 (September 18)	
08:00-08:45	Breakfast DE	UM
09:00-09:45	Opening Panel: Accelerating the green transition for a more sustainable future SoG, HCD, FN, CD	UM
09:45-10:00	Change of scene and break	
10:00-10:45	Green supply chains FLSmith	
10:45-11:00	Change of scene and break	
11:00-11:45	Offshore wind: Permitting Ørsted & Vestas	EM
11:45-12:00	Change of scene and break	
12:00-12:45	Offshore wind: Value Chains Ramboll	
12:45-14:00	Lunch (light servings)	
14:00-14:45	Upscaling Green Hydrogen Production Ramboll	
14:45-15:00	Change of scene and break	
15:00-15:45	Green Shipping Corridors Mærsk McKinney-Møller Center for Zero Carbon Shipping	
15:00-15:45	Change of scene and break	
16:00-17:45	Accelerating the SDGs UNGC & Beyond2030	
18:00-21:00	18:00-21:00 Financing the Green Transition PensionDanmark, PKA & State of Green	UM

CASE: CARLSBERG
REGENERATIVT
LANDBRUG



TRADE COUNCIL

KONGRESDELEGATION TIL DANMARK – OFFSHORE VIND



Folketinget



US Ambassade i København



Horns Rev 2 vindmøllepark

NORDISK SAMARBEJDE INDEN FOR TECH & DIVERSITET

**NORDIC INCLUSIVE
INVESTOR SUMMIT**
UNLOCK YOUR STARTUP
2023

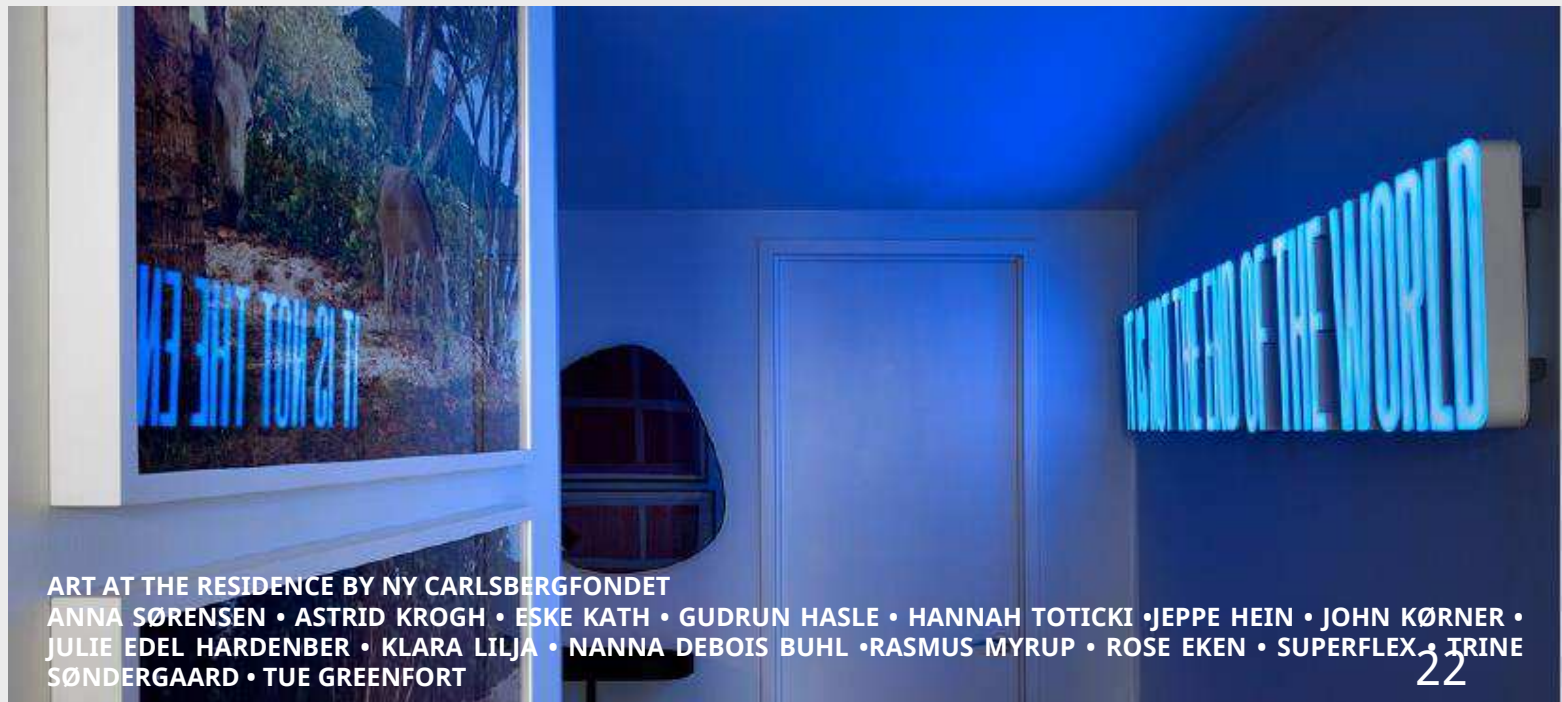
UNLOCK
YOUR
STARTUP



KULTURDIPLOMATI & PUBLIC DIPLOMACY



UDENRIGSMINISTERIET – Generalkonsulatet i New York



ART AT THE RESIDENCE BY NY CARLSBERGFONDET
ANNA SØRENSEN • ASTRID KROGH • ESKE KATH • GUDRUN HASLE • HANNAH TOTICKI • JEPPE HEIN • JOHN KØRNER •
JULIE EDEL HARDENBER • KLARA LILJA • NANNA DEBOIS BUHL • RASMUS MYRUP • ROSE EKEN • SUPERFLEX • IRINE
SØNDERGAARD • TUE GREENFORT

NEW YORKS KULTURSCENE I TAL

- 2.500+ verdensførende kulturinstitutioner
- 132.000+ amerikanske og internationale kunstnere (ca. 60+ danske)
- 600.000+ jobs i den kreative industri, heraf 160.000+ relateret til kunst
- 13% (\$20,3 mia. i 2022) af NYCs GDP genereres af kultur- & oplevelsesindustrier
- 65,2+ mio. turister årligt (før COVID)
- 600+ kulturarrangementer pr. dag (før COVID)
- \$241 mio. støtte fra NYC i 2024 (mere end NEAs knap \$229 mio. i 2023)
- Non-profit kulturinstitutionernes økonomi:
 - 11% - offentlig støtte
 - 89% - kommercielle indtægter og fondsstøtte/filantropi
- Verdens største koncentration af toneangivende medier



STRATEGISK RAMME 2022-24

TRE OVERORDNEDE TEMAER

1. Bæredygtighed & grøn omstilling
2. Tech & den demokratiske dialog
3. Land & by

