Why Data Matters In the Skills-First Movement
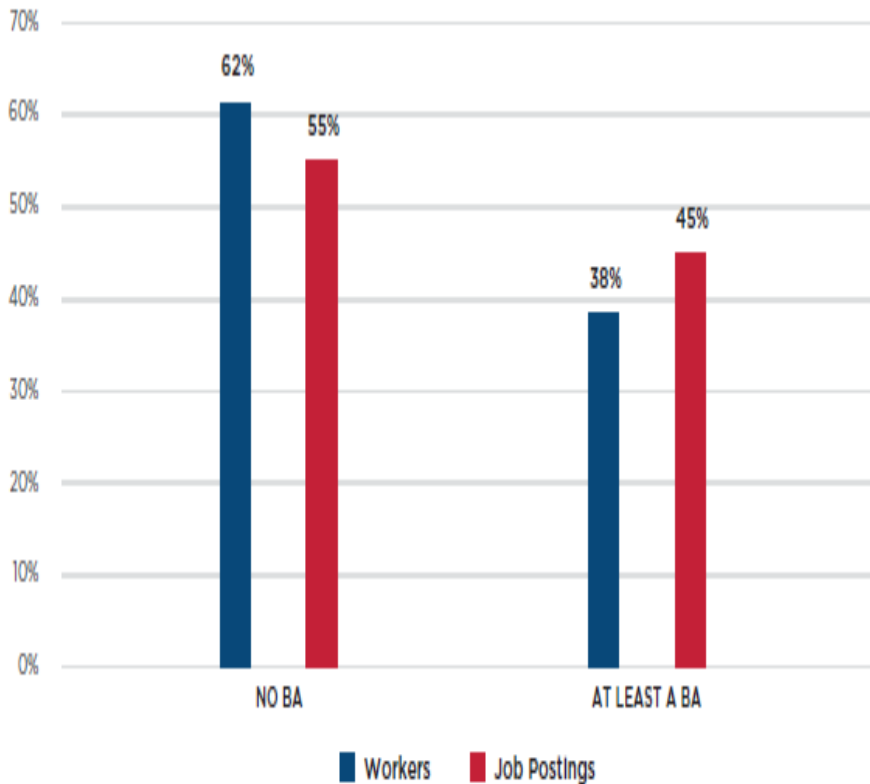
Matt Sigelman, President
The Burning Glass Institute
msigelman@burningglassinstitute.org
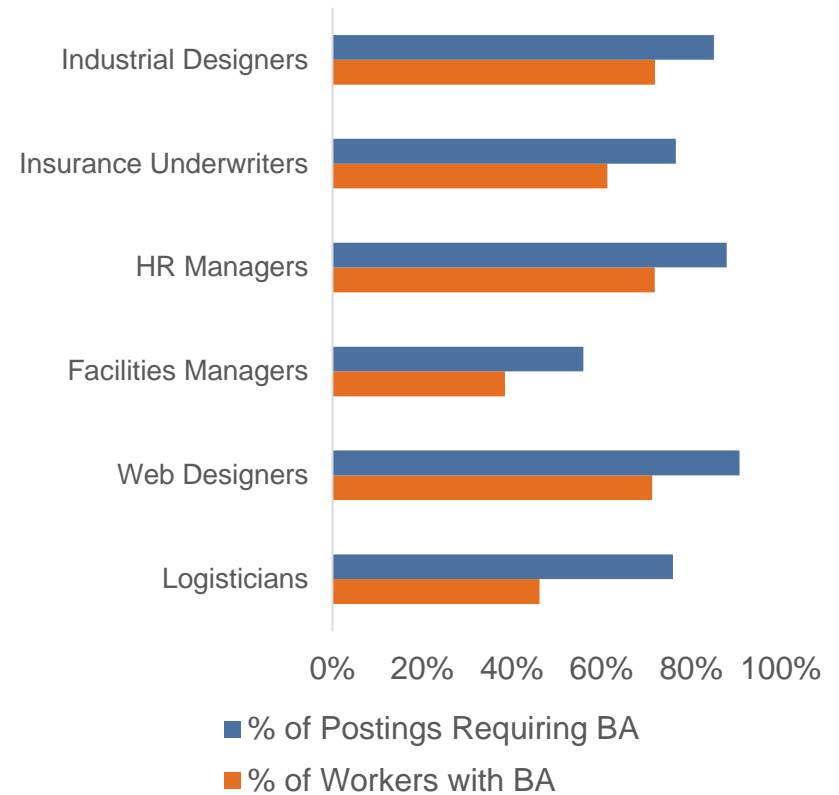October 2024

Labor Markets Misalignment

Firms are requiring degrees for occupations where incumbent workers often don't have them

Job Postings Requesting a Bachelor's Degree Outpace the Share of Workers With One

Postings requiring a degree v. workers with a degree, by occupation

The Labor Market Is Historically Tight
## Demographic trends indicate that tightness is here to stay

The working age population is shrinking. Further, workforce participation is historically low even as the pandemic has subsided

Though tightness is subsiding somewhat, the labor market remains historically tight

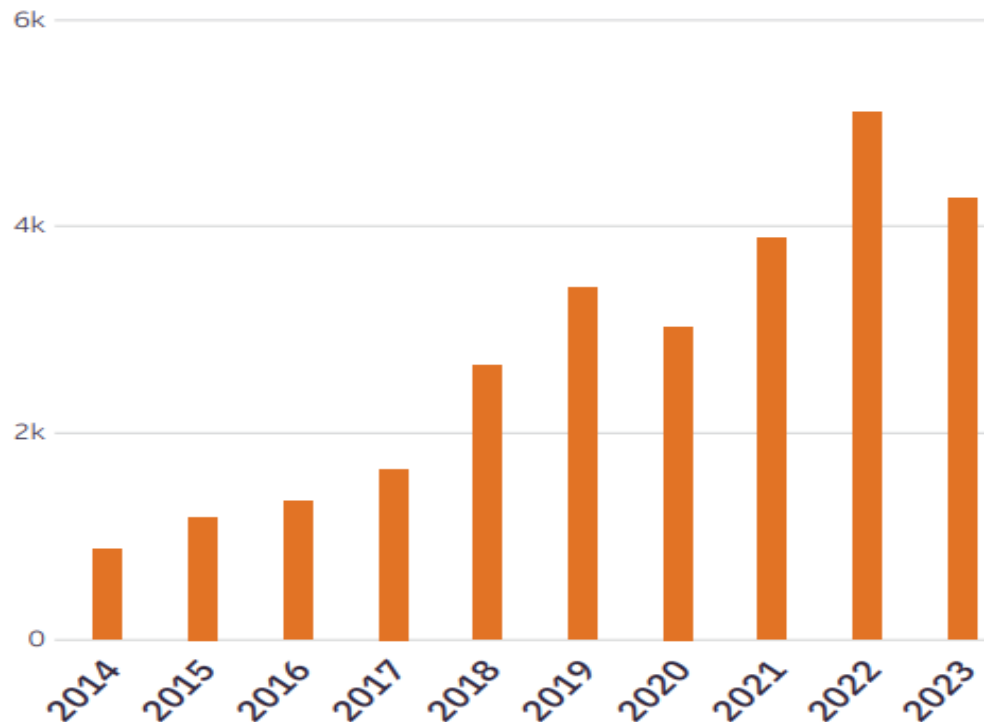**Monthly Working Age Population Growth Rate - 12-Month Moving Median**

Burning Glass Institute Labor Market Tightness Index
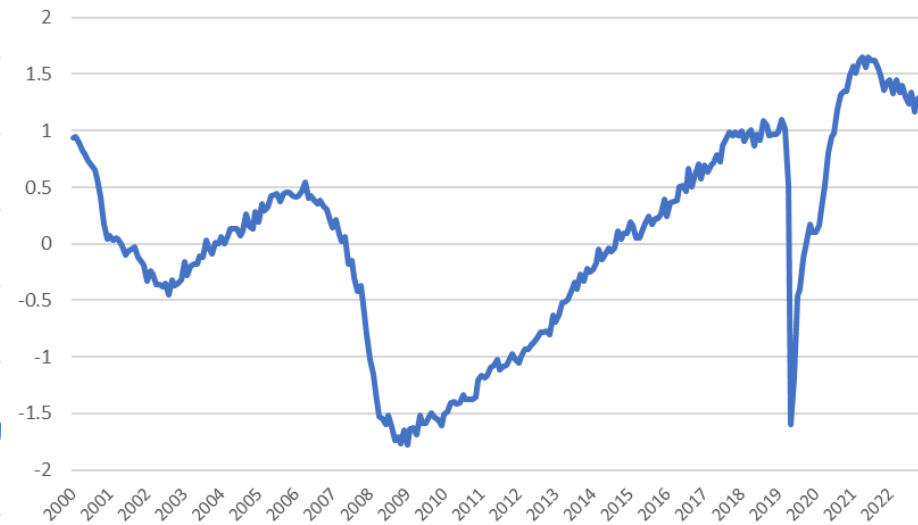
Data Matters

We've seen a 4x increase in job postings that removed degree requirements – indicating traction for the skills-first movement

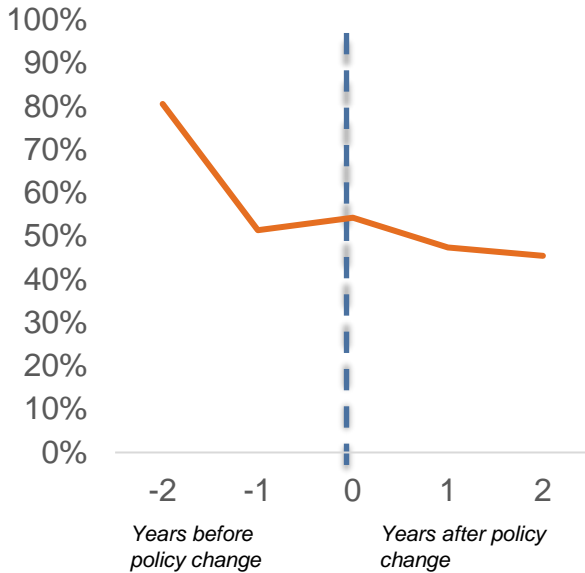FIGURE 2: **Roles in sample that removed requirements per year**

Source: Burning Glass Institute analysis of Lightcast job postings data

But The Right Data Matters More

Digging into actual hiring patterns reveals change has been inconsistent. We see three archetypes of firms, with roughly a third of firms in each

Some companies are driving real change and are **leaders in skills-based hiring**

Meanwhile, others are **struggling to translate intent into practice,** showing minimal changes in non-BA hires

Still others, after initial success, are **backsliding** into old habits

Share of BA's hired into roles that removed degree requirements

Examples: *Yelp, Sachs, Cigna, Koch*
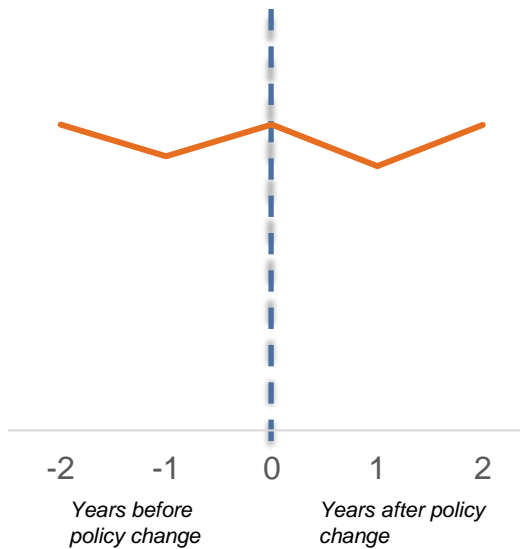
Examples: *Bank of America, Lockheed Martin, Oracle*
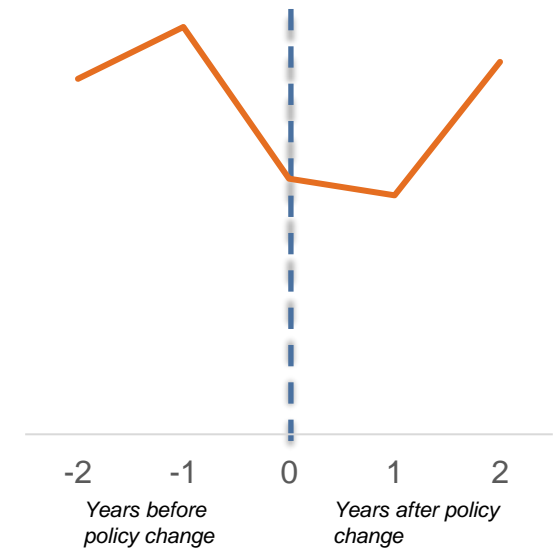
Examples: *Delta Airlines, Nestle, Uber*

Skills Based Hiring Is a Win-Win

Despite lack of movement, our data shows skills-based hiring benefits both firms and workers

When workers without a BA land a role where a firm dropped the degree requirement, they see a ~25% increase in salary, equating to, on average, $12,400

When firms hire non-degreed workers for these roles, these workers have an 8-percentage point higher retention rate (61% v. 53% retention over 2 years)

Increase in pay for non-degreed hires

+25%

PREVIOUS ROLE   NEW ROLE

Two-year retention rates for non-degreed v. degreed hires

+20%

BASELINE   SBH LEADERS
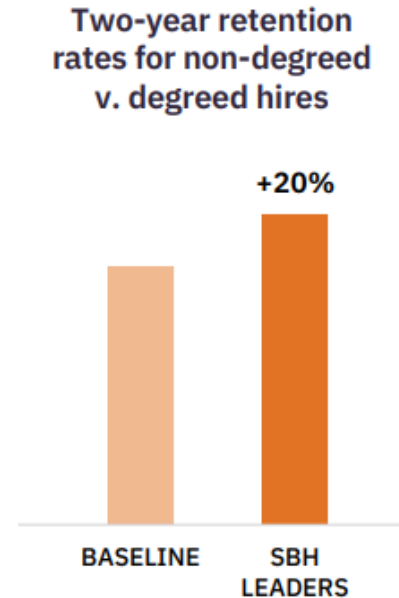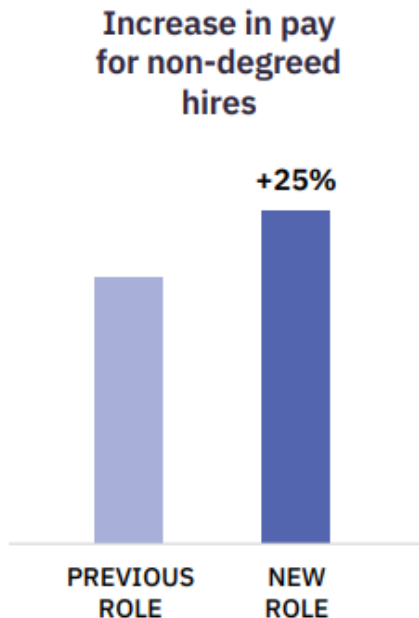
An Array of Measurements Of 'Skillability'

The skills-first movement needs measurement and tracking of data across a range of categories

Today's Focus	**Restructuring Role Requirements**	Removal of degree requirements from specific roles, captured as a static value as well as change of over time
	Changes In Hiring Behavior	Hiring of non-degreed workers into those specific roles, captured as a static value as well as change of over time
	Changes in Promotion Patterns	Promotion rates of non-degreed workers, captured as a static value as well as change of over time
	Deeper Validations (Future Phases of Work)	• Articulation of soft requirements / skills, especially among skills-based mobility leaders • Alignment between advertised skill needs and skills held by hires • Acceptance of non-degreed credentials in postings and among hires • Share of internal promotions / hires from within of non-degreed workers into specific occupations • Willingness to compromise on requirements and/or willingness to train

The Pacesetters

Costco, Best Buy, HSBC, and BWM are pacesetters – removing degree requirements and implementing skills-based hiring in practice

Requirements vs Hires
All: All

Hires: Degree Removed vs Requirements: Degree Removed

Data points labeled: Santander Bank, Continental, US Bank, TD Bank, Citizens Bank, Nissan, Siemens, Volvo, Lowe's, Mercedes-Benz Group, Publix, Caterpillar, BD, Target, Cardinal Health, Abbott Laboratories, General Motors, Ford, Amazon, Boston Scientific, Medtronic, Zimmer Biomet, ASML, Intuitive, BMW, Barclays, Best Buy, Kroger, Tesla, Lululemon, Nordstrom, Toyota Motors, Stellantis, The Home Depot, Staples, Macy's, 3M, Goldman Sachs, Wayfair, Cummins, Kohl's, HSBC, Wells Fargo, Costco

Industry Group
- Auto Manufacturers & Parts
- Financial Services
- Manufacturing
- Medical Devices & Distribution
- Retail

Specificity Drives Actionability
Analyzing role-level hiring can pinpoint areas of effective practice

Skillability Improvements
Auto Manufacturers & Parts, Financial Services, Manufacturing and 2 more: Software Development and Programming

For **Software Developer** roles, Intuitive and Barclays are making the most progress in not only removing degree requirements but also in shifting hiring patterns to bring on more non-degreed talent

Beyond Hiring: Skills-Based Promotion

The skills-based movement cannot stop at the front door. How do workers progress after they are hired?

Advancements vs Hires
All: All

Firms that are best at making non-degreed hires tend to be more effective at moving non-degreed talent up the ranks

Industry Group
- Auto Manufacturers & Parts
- Financial Services
- Manufacturing
- Medical Devices & Distribution
- Retail

Skills-Based Mobility Needs Skills-Based Currency

It's now possible to measure the efficacy of certifications across an array of dimensions.

Overall

1. Troubleshooting It Remote Administration - LinkedIn
2. Cybersecurity Red Badge - Eleven Fifty Academy
3. Certified Identity and Access Manager - Identity Management Institute (IMI)

Employment

1. Cisco Certified CyberOps Associate - Cisco
1. Cybersecurity Fundamentals Certificate - IBM
2. Introduction To Cybersecurity Course - Codecademy

Opportunity

1. Sumo Logic Security and Compliance Certified - Sumo Logic
1. MS Exchange Server Administration - Brainbench
2. Corporate Cybersecurity Management - Cybrary

Access

1. CIS 201: Computer Hardware- Year Up
1. Cisco Networking Academy - Cisco
2. Learning Computer Security and Internet Safety - LinkedIn

Learning

1. GIAC Systems and Network Auditor Certification (GSNA) - Global Information Assurance Certification (GIAC)
1. ITIL Foundation- Servicenow
2. ITIL Release Control and Validation (ITIL-RCV) - Information Technology Infrastructure Library (ITIL)

Demand is determined at the category level - these credentials have the same demand score.

Skills-Based Mobility Needs Common Language

Retailer A - Store manager in Chicago

- Accountability
- Adaptability
- Business objectives
- Business process
- Communication
- Community outreach
- Customer service
- Diversity awareness
- Ethical standard and conduct
- Management
- Merchandising
- Performance management
- Process improvement
- Profit and loss (P&L) management
- Retail operations
- Sales
- Teaching
- Visual merchandising

Retailer B - Store manager in Chicago

- Business relationship management
- Coaching
- Critical thinking
- Customer service
- Management
- Marketing
- Merchandising
- Performance review
- Physical inventory
- Sales
- Sales strategy
- Selling techniques
- Supervision

Same skill in both roles

Similar skill in each role

No overlap

Identifying Launchpad Jobs

Skills-based hires lack data-driven guidance; we use a range of metrics to identify which jobs serve non-college workers best

Wages
Does the job offer strong wages today and into the future?

Healthcare
Does the job provide health insurance?

Mobility
Does the job offer strong pathways to better opportunity?

Stability
Is the job secure, and is it relatively immune from automation risk?

Top Launchpad Jobs

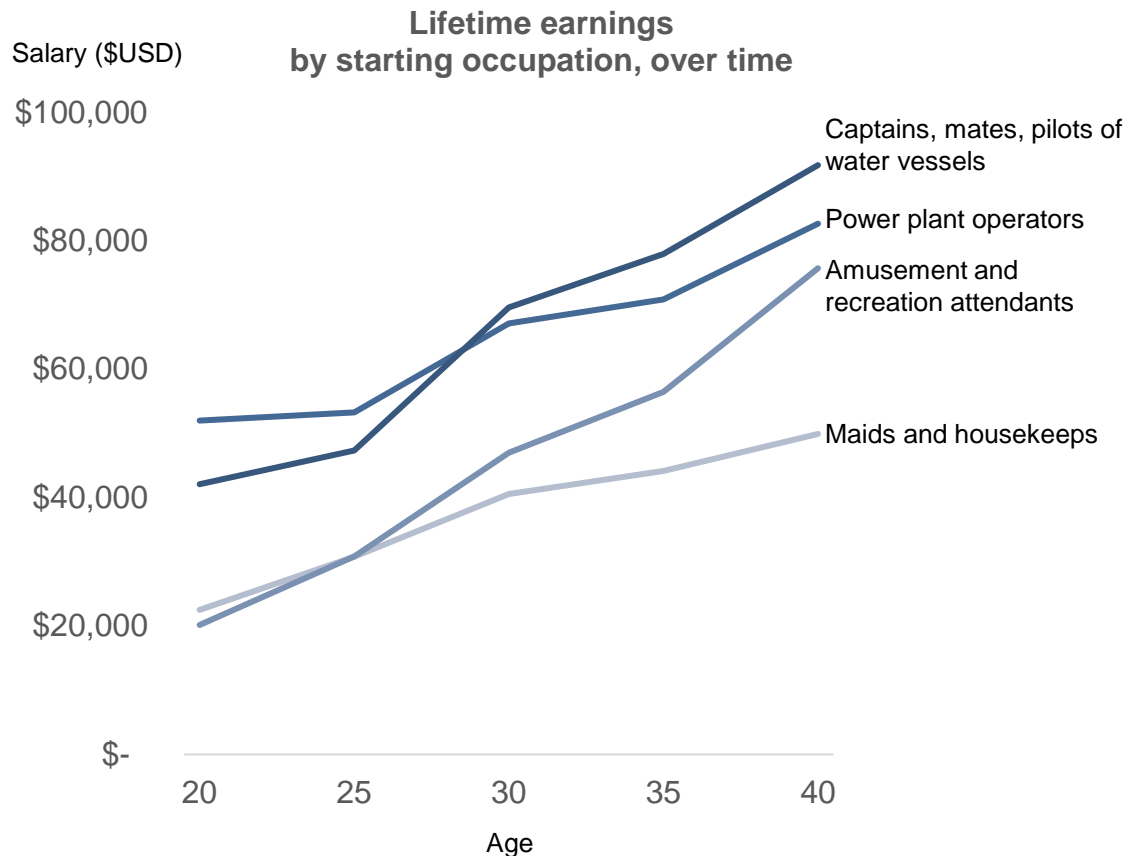| Launchpad Job Title	Score
Power Plant Operators	86
Command and Control Center Specialists	81
Power Distributors and Dispatchers	80
Infantry	79
Aerospace Engineering Technicians	78
Chemical Plant and System Operators	78
Petroleum Pump System Operators	78
Plant and System Operators	78
Electrical Engineering Technicians	77
Firefighters	77
Military Enlisted Tactical Operations Specialists	77
Calibration Technologists and Technicians	76
Nuclear Technicians	76
Electrical Power-Line Installers and Repairers	76
Signal and Track Switch Repairers	75

While over half of Launchpad jobs involve technical, maintenance, or manufacturing work, there are Launchpad jobs in every field – 14% of these roles are in Healthcare and another 20% in white collar occupations

The Road To Success Isn't Random
Data is critical to identify which paths lead to the best outcomes

Different first jobs lead to very different careers…

But workers lack visibility

Lifetime earnings by starting occupation, over time

Salary ($USD)

- $100,000
- $80,000
- $60,000
- $40,000
- $20,000
- $-

Captains, mates, pilots of water vessels

Power plant operators

Amusement and recreation attendants

Maids and housekeeps

Age: 20, 25, 30, 35, 40

Despite

1.9M

Entry-level openings for "Launchpad" jobs in 2023…

Fewer than

1 in 10

Eighteen-year-olds is employed in one of them

Data-Driven Strategies Ease Impact for Workers
Data-driven models facilitate better results vs. one-size-fits-all outplacement

Firm's Local Workforce Size →

Firm Employs Large Share of Small Local Workforce	**Firm Has a Large Presence in a Major, Diversified Labor Market**
Firm Is a Minor Employer in a Small Labor Market	**Firm Has a Small Presence in a Large Labor Market**

Overall Local Labor Market Size →

- A major firm is anticipating and preparing for automation-driven impacts in a range of functions and locations

- Effective strategies need to account for the local landscape of opportunity for each affected talent pool – including what transitions are available within the firm and how big a role the firm plays in each local labor market.

- Data-driven planning enable smart intervention.

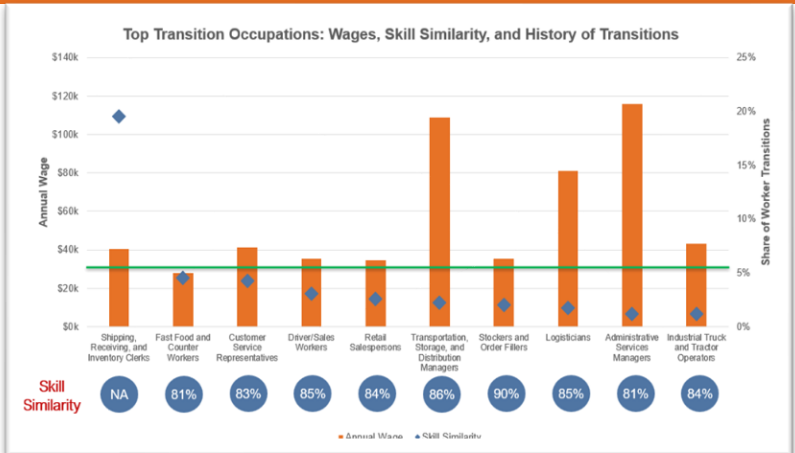# When It Comes to Reskilling, All Jobs are Local

Workers in the same role at the same firm can require very different supports

1. Determine Company's local labor market share of each DC occupation, map red/yellow/green
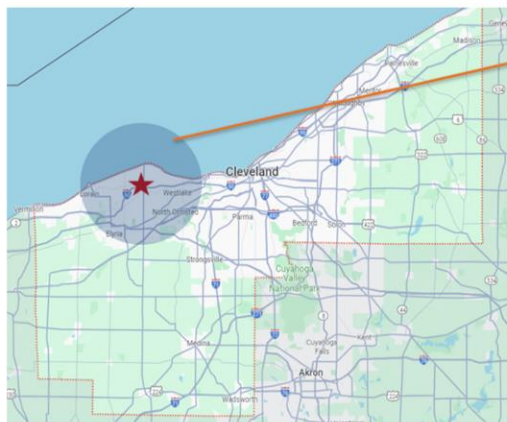
Share of Local Employment by Occupation for each DC

Distribution Center	Laborers and Freight, Stock, and Material Movers, Hand	Stockers and Order Fillers	Transportation, Storage, and Distribution Managers	Shipping, Receiving, and Inventory Clerks	Packers and Packagers, Hand
Metropolitan Statistical Area #	0.5%	0.4%	0.8%	0.6%	1%
Metropolitan Statistical Area #	23%	44%	69%	23%	0%
Metropolitan Statistical Area #	2%	0.5%	1.5%	3%	0.2%
Micropolitan Statistical Area #	4%	0.9%	3%	4%	12%
Metropolitan Statistical Area #	0.4%	0.4%	0.1%	0.1%	0%

2. Identify skill-adjacent transitions that represent positive wage outcomes for workers

Top Transition Occupations: Wages, Skill Similarity, and History of Transitions

Skill Similarity: NA, 81%, 83%, 85%, 84%, 86%, 90%, 85%, 81%, 84%

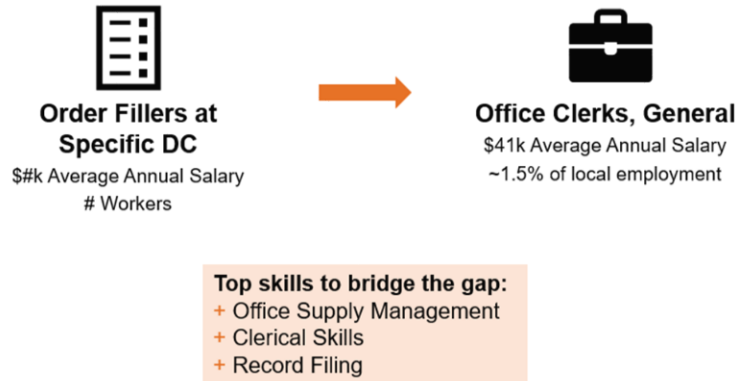## 3. Map theoretically feasible job transitions to local job opportunities

- 2023 Job Postings in Area: 12k
- 2023 Local Job Postings in DC Occupations: 5k

Top Job Posting Employers of DC occupations:
- [Employer] # Postings
- [Employer] # Postings
- [Employer] # Postings
- [Employer] # Postings
- [Employer] # Postings

4. Identify skill gaps between current and target occupations for targeted reskilling

Order Fillers at Specific DC
$#k Average Annual Salary
Workers

→

Office Clerks, General
$41k Average Annual Salary
~1.5% of local employment

Top skills to bridge the gap:
+ Office Supply Management
+ Clerical Skills
+ Record Filing

Company Practice Matters

The American Opportunity Index shows that some firms deliver far stronger mobility and access for their workers than others

Compared to Bottom-Quartile Firms, Top-Quartile Firms Are…..
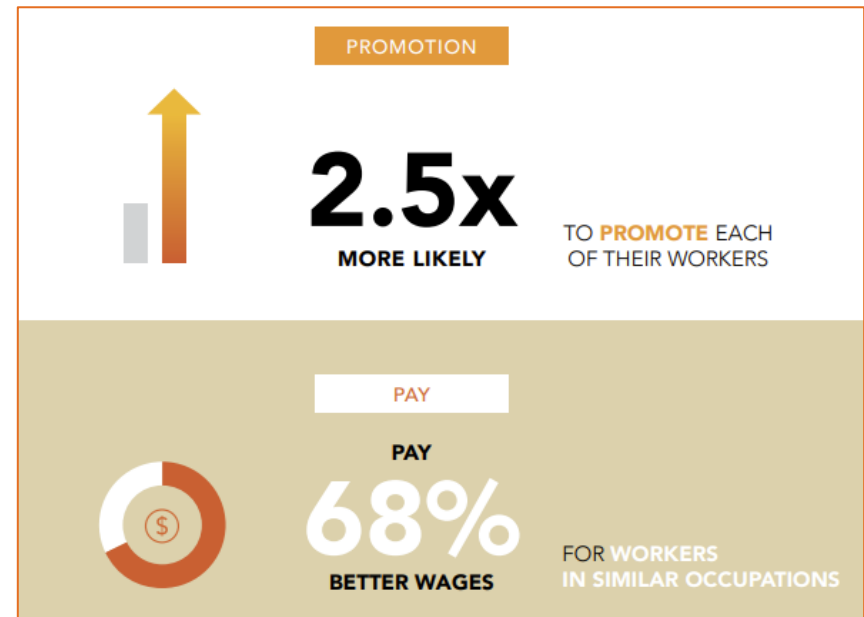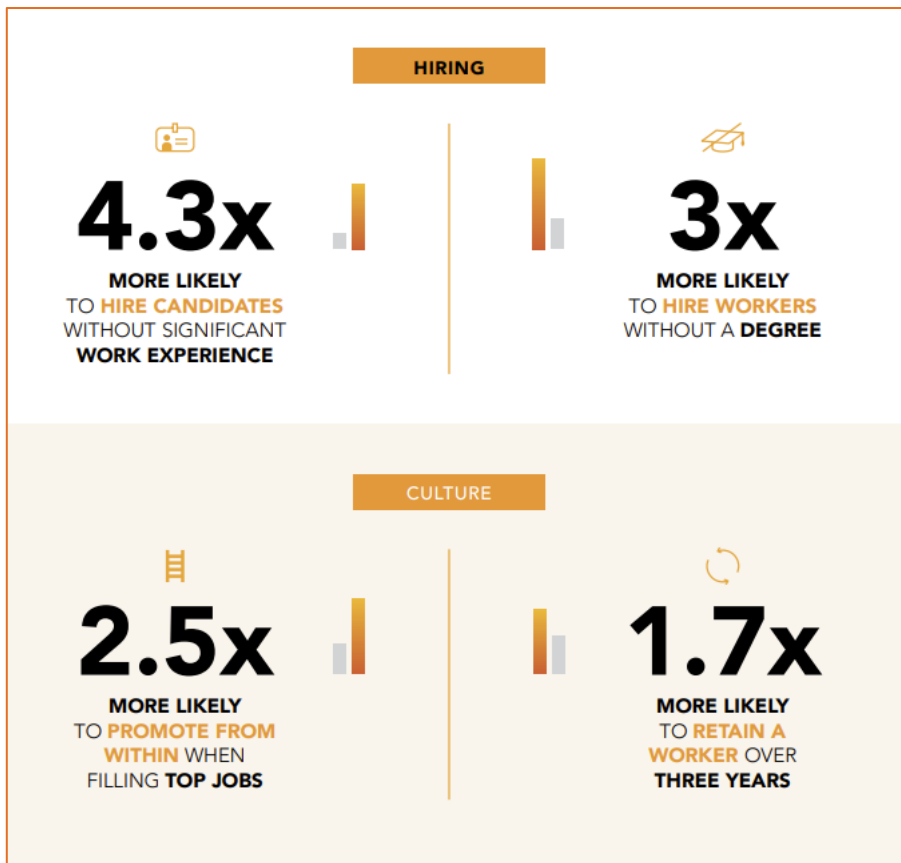
A New Paradigm of Productivity
We need a new framework fit for the Human Economy

Historically, we have focused on driving down the cost of **inputs**

By investing in skills, we can grow productivity by making workers and their **outputs** worth more

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