INCLUSIVE FUTURE OF WORK:
RESEARCH INSIGHTS

THE FOURTH INDUSTRIAL REVOLUTION IS HERE

Digital disruption is rapidly reshaping daily life and society as a whole—and allowing businesses in every industry to reimagine what's possible.

Intelligent technologies — such as Analytics, Big Data, Artificial Intelligence (AI) and Robotics — are **reshaping work** and **redefining skills** that are in demand across industries and geographies.

INTELLIGENT TECHNOLOGIES BRING OPPORTUNITIES FOR GROWTH

By 2022, AI alone could boost revenues by 38% and employment by 10%[1]

WORKERS WILL NEED
NEW SKILLS TO ADAPT

Workers in less complex roles* face a double disadvantage

SPEND MORE TIME ON AUTOMATABLE ACTIVITIES

7x

Workers in less complex roles are seven times more likely to spend a significant proportion of time on automatable activities vs. workers in more complex jobs[2†]

HAVE FEWER RESOURCES

Workers in less complex roles have more limited financial safety net,[3] lower job security,[4] lower proficiency in high-demand skills,[5,6] and unequal access to training[7]

*Role complexity has been defined in accordance with the International Labor Organization's (ILO) International Standard Classification Occupations (ISCO), which groups occupations across eight categorizations, and ILO Skill Levels. Less complex roles consist of routine activities and typically require only primary or secondary education.
†Analysis conducted in US, Brazil, UK, France, Germany, S Africa, and Japan. Represents the average likelihood of automation/augmentation.

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INCLUSIVE FUTURE OF WORK
ATLANTA LOCAL MARKET RESEARCH

OUR RESEARCH APPROACH

METHODOLOGY

Using data from the G20 reports, O*Net, American Community Survey, Bureau of Labor Statistics & MIT Living Wage Calculator, combined with Accenture subject matter expertise and local ethnographic interviews, we performed analysis to:

- Assess technology impact estimates for tasks and occupations

- Investigate Atlanta's MSA-level workforce data, matching technology impact at a local level and calculating other factors (i.e.: wage analysis, growth forecast, demographic info)

- Understand the mindsets and experiences of workers—their challenges, beliefs, priorities, present/past/future circumstances in relation to workplace participation

- Aggregate a macrolevel view of local workforce insights, current trends and market/stakeholder landscape

WHAT IS THE IMPACT OF AUTOMATION TO THE WORKFORCE IN ATLANTA?

OCCUPATIONS IMPACTED

19% of occupations (303k jobs) have a **high potential for automation**

Sample Occupations **Most** Impacted by Automation

PACKERS
86% Automation Potential

DISHWASHERS
92% Automation Potential

LANDSCAPING WORKERS
98% Automation Potential

CASHIERS
73% Automation Potential

BOOKKEEPING CLERKS
69% Automation Potential

FOOD PREP WORKERS
92% Automation Potential

LABORERS
86% Automation Potential

JANITORS
83% Automation Potential

HOUSEKEEPING STAFF
75% Automation Potential

Sample Occupations **Least** Impacted by Automation

URBAN/REGIONAL PLANNERS
0% Automation Potential

MARKETING MANAGERS
1% Automation Potential

SALES MANAGERS
1% Automation Potential

PHYSICIANS
5% Automation Potential

SURGEONS
5% Automation Potential

PUBLIC RELATIONS SPECIALISTS
0% Automation Potential

COMPUTER HARDWARE ENGINEERS
6% Automation Potential

SOFTWARE DEVELOPERS
3% Automation Potential

SECONDARY TEACHERS
4% Automation Potential

Sources: Accenture Research, Bureau of Labor Statistics, O*Net
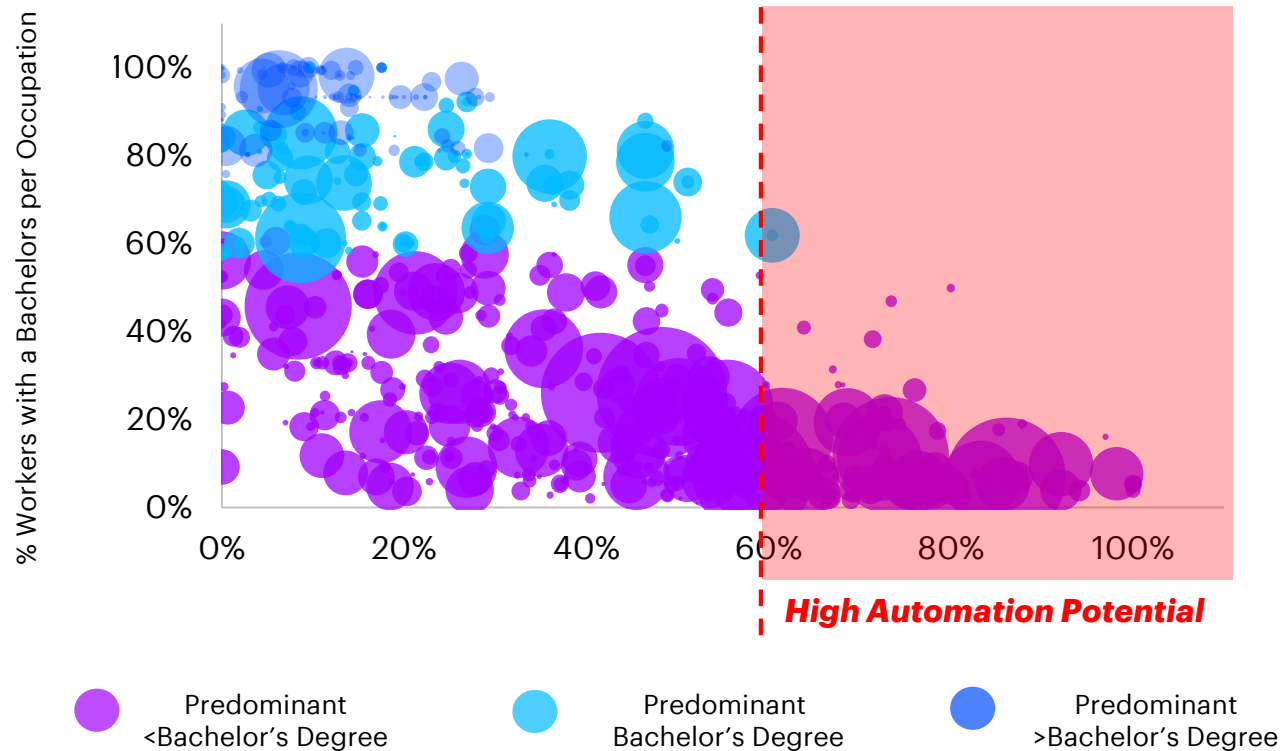
EDUCATION: A LEADING INDICATOR IN AUTOMATION

Less-degreed workers are more likely to have jobs susceptible to automation

Automation Potential by Educational Attainment

% Workers with a Bachelors per Occupation

High Automation Potential

● Predominant <Bachelor's Degree

● Predominant Bachelor's Degree

● Predominant >Bachelor's Degree

KEY INSIGHTS

74%
of highly automatable occupations are predominantly held by workers **without** a bachelor's degree

51%
of workers in over the age of 25 **do not** have a bachelor's degree and face barriers to entry in the job market

"Employers are seeking a bachelor's degree for jobs that formerly required less education, even when this makes the position harder to fill."

–"Moving the Goal Posts: How Demand for the Bachelor's Degree is Reshaping the Workforce" by Burning Glass

Sources: Accenture Research, Bureau of Labor Statistics, O*Net, American Community Survey Census.org, Harvard Business Review

THE WORKER EXPERIENCE

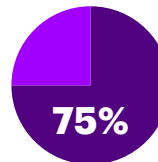| Perception of Technology and Automation	Motivations	Frustration/Challenges
• Openness to use technology on/off the job • Increase productivity, efficiency, ease, knowledge • Allows for a better lifestyle • Technical issues impact productivity, accuracy, customer satisfaction	• Family • Making a Difference • Giving Back • Personal Development	• Skill Gaps • Experience Required • Limited exposure to upskill/match skills to experience • Lack of feedback when denied for jobs • Ageism/Racism

80%

WORKERS ARE TECH-SAVVY

80% is willing to embrace technology and the skills needed

75%

THEY DESIRE TO MAKE AN IMPACT

75% are motivated by helping their families and others
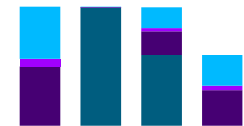
MANY FACE PERSONAL BARRIERS

75% don't have the skills required by employers

Sources: Ethnographic interviews

HOW WE CAN **BUILD SOLUTIONS?**

OPPORTUNITY IDENTIFICATION

After categorizing jobs to frame opportunities, we can brainstorm ideas for solutioning to:

- Understand the needs of both workers and employers to successfully transition impacted workers into **Opportunity Jobs**

WHAT DEFINES AN OPPORTUNITY JOB?

AN "OPPORTUNITY OCCUPATION" IS ONE THAT HAS A LOWER LIKELIHOOD OF AUTOMATION, PAYS A LIVING WAGE, AND IS PROJECTED TO GROW

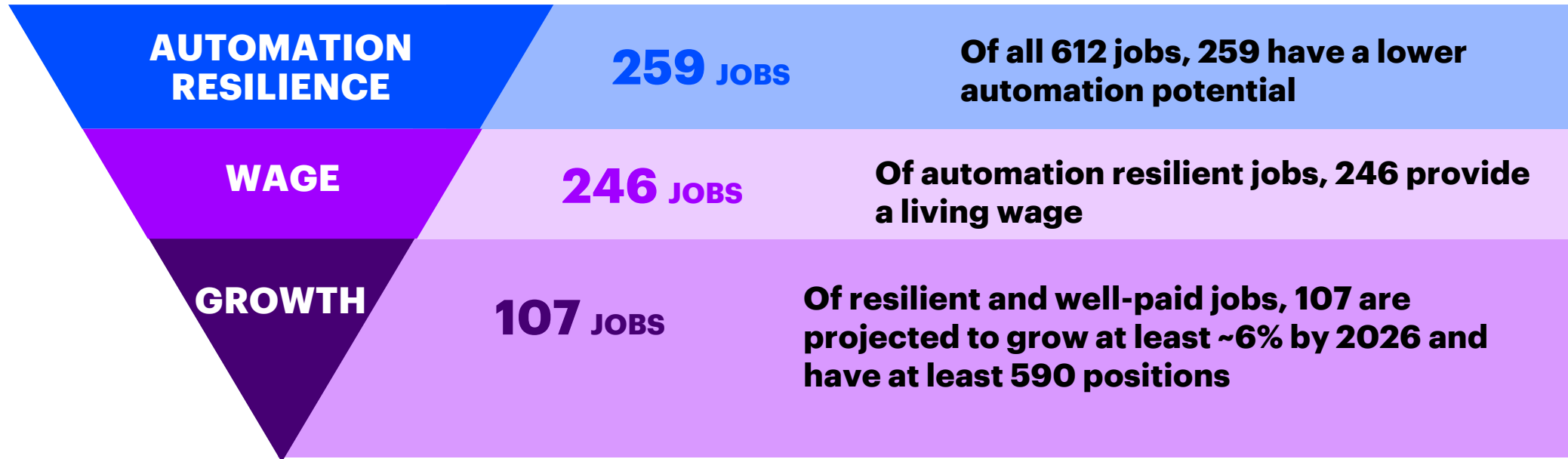| FACTOR	SIGNIFICANCE
Automation Resilience	Workers can move into more stable positions that will have a lower potential of being impacted by automation
Pays Livable Wages	Workers can at least meet living requirements for Atlanta by securing a job that provides at least a living wage as defined by the MIT Living Wage Calculator
Promising Growth Projections	Growing occupations based on market demand will have more openings in the future, and provide more job security to those employed

Sources: Accenture Research, Bureau of Labor Statistics, O*Net, MIT Living Wage Calculator

DEFINITION OF OPPORTUNITY JOBS IN ATLANTA

AUTOMATION RESILIENCE	**259** JOBS	**Of all 612 jobs, 259 have a lower automation potential**
WAGE	**246** JOBS	**Of automation resilient jobs, 246 provide a living wage**
GROWTH	**107** JOBS	**Of resilient and well-paid jobs, 107 are projected to grow at least ~6% by 2026 and have at least 590 positions**

$$\frac{\textbf{107 Jobs}}{\textbf{589K Positions}}$$

Sources: Accenture Research, Bureau of Labor Statistics, O*Net, MIT Living Wage Calculator

INSIGHTS IN OPPORTUNITY IDENTIFICATION

"The requirement that everyone wants you [to] have specific knowledge of their job which you can't get unless you work there. They also require a certain number of years of experience. It's hard to find entry into a company."

Maya, 30

ACCESSIBILITY IS KEY

- Of Opportunity Jobs, **63%** have high barriers to entry, making transitions difficult
- Jobs with low barriers to entry typically see higher automation potential

AUGMENTATION IS A FACTOR

- **84%** of Opportunity Jobs have high levels of augmentation potential
- Augmentation present new opportunity for skilling, as workers will need to interact with technologies more often

Sources: Accenture Research, Bureau of Labor Statistics, O*Net, MIT Living Wage Calculator, American Community Survey, Ethnographic Interviews

ATLANTA OPPORTUNITY JOBS*

Data is as of 2018

Job Title	Role Cluster	Mean Hourly Wage**	% With Bachelor's or Higher†	Augmentation Potential††
Computer and Information Systems Managers	Management and Leadership	$70.75	75%	54%
General and Operations Managers	Management and Leadership	$59.01	46%	44%
Software Developers (Applications)	Science and Engineering	$51.18	85%	82%
Information Security Analysts	Analytical Subject Matter Expertise	$46.26	68%	83%
Financial Analysts	Science and Engineering	$41.82	86%	85%
Occupational Health and Safety Specialists	Analytical Subject Matter Expertise	$35.78	64%	89%
Dental Hygienists	Human-centered services	$32.37	38%	92%
Diagnostic Medical Sonographers	Relational Subject Matter Expertise	$30.94	33%	81%
Special Education Teachers (Secondary School)	Empathy and Support	$28.18	85%	75%
Interpreters and Translators	Relational Subject Matter Expertise	$27.31	53%	100%
Mental Health and Substance Abuse Social Workers	Empathy and Support	$19.10	79%	44%
Hairdressers, Hairstylists, and Cosmetologists	Human-centered Services	$13.30	7%	37%

*Opportunity jobs are defined as jobs that pay livable wages according to the MIT Living Wage Calculator, spend less than 22.5% of their time on automatable tasks and have at least a 6% expected growth rate by 2026.

**Mean Hourly Wage is defined by the Occupational Employment Statistics and Bureau of Labor Statistics using MSA employment data.

†Education level is calculated using the American Community Survey data to measure the percentage of incumbent workers that have a bachelor's degree or higher

†† Augmentation potential is defined using Accenture automation expert analysis to measure the percent of time that an occupation that has augmentation potential. Augmentation potential represents the potential for activities to be improved through human and machine collaboration.

QUESTIONS?

SOLUTION IDEAS & THEMES

Workforce Elevation Studio: Single stop workforce development ecosystem hub in target areas for demand-driven Future of Work opportunities (ie: skilling, experiential/apprenticeships, jobs etc.)

Comprehensive wraparound services that include emotional/mental health & wellness, transportation, child care etc. and leverage public/private resources

Targeted support from life coaches, mentors and guidance counselors for youth and adults for helping obtain and retain work

Assessment tool for competencies and capabilities to understand workers' motivations and skills and generate job matches—work with employers to change criteria

Online learning platforms that reimagine education—focus on demand-driven skilling and credentialing, not just degree attainment for workers, students, interns, apprentices etc.