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23

# Manufacturing Turnover Study

A COMPREHENSIVE ANALYSIS OF OHIO'S  
MANUFACTURING INDUSTRY AND KEY  
FACTORS THAT INFLUENCE WORKERS TO  
LEAVE THEIR MANUFACTURING JOBS

# OHIO MANUFACTURING TURNOVER STUDY

**A COMPREHENSIVE ANALYSIS OF OHIO'S  
MANUFACTURING INDUSTRY AND KEY FACTORS THAT  
INFLUENCE WORKERS TO LEAVE THEIR  
MANUFACTURING JOBS**



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# EXECUTIVE SUMMARY



The manufacturing sector has undergone significant transformations due to the global pandemic, resulting in intricate challenges with far-reaching effects. Among these challenges, **recruiting and retaining a skilled workforce have become focal points** for the Ohio Manufacturers' Association and its members. The difficulty of acquiring and maintaining a proficient workforce, coupled with the challenges of retaining talent during onboarding, has prompted in-depth investigation.

**Understanding why workers leave their roles** has become increasingly important. While efforts to attract new talent and address perceptions of career transitions have gained attention, a notable gap remains in understanding early-stage attrition—workers leaving within their first six months of employment.

To comprehend this trend, secondary research has been conducted across various themes. Exploring the historical context and current events, understanding industry and technological developments, assessing **health-related aspects**, delving into **career skills**, adopting a **global perspective**, and considering **social action** have all been part of the analysis.

By leveraging the advanced capabilities of O.Y.E. Intelligence Software, **Nativa has extensively examined social media conversations and online discussions** to extract valuable insights into public perceptions, sentiments, and emerging trends related to the manufacturing workforce to grasp the reasons behind the workforce departure and implement strategies for industry revitalization and sustainable growth.

Key research findings highlight important aspects: individuals within the industry, particularly those in trades, find pride in their strong work ethic and connection to their employers. The industry's incorporation of technology necessitates skill proficiency, benefiting from the younger generation's ease with technology. Amid generational differences, changing career perspectives guide advancement approaches. Younger generations prioritize careers aligned with their values and embrace change, while older counterparts navigate family responsibilities and seek better livelihoods. **The following report delves into potential courses of action to address these findings.**

# ABOUT NATIVA

To gain profound insights into labor force trends and effectively **capture the sentiments and perspectives of the manufacturing workforce across Ohio**, Nativa Inc. has undertaken a comprehensive research study. This study employs a combination of quantitative and qualitative methodologies, leveraging our state-of-the-art proprietary **social listening tool** in tandem with **extensive secondary research**.

**NATIVA** is a data-driven communication agency that specializes in designing and implementing strategies capable of engaging and informing diverse populations. Nativa has a proprietary social data analytics technology, **O.Y.E. Business Intelligence (O.Y.E.)**, that is utilized to capture attitudes and opinions on particular subjects. These insights go on to inform marketing campaigns across digital platforms and media channels.

**Nativa's research is comprised of the following two components:**



## *Phase 1* — **Secondary Research**

Secondary research was conducted to identify the key factors that influence workers to leave their manufacturing jobs. Additionally, it sought to understand the challenges and opportunities faced by manufacturing workers.



## *Phase 2* — **Social Listening Data Analytics**

A comprehensive social data analytics report was developed utilizing O.Y.E., a language-neutral data analytics solution that captures online conversations and turns data into actionable insights.

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# SECONDARY RESEARCH



## OHIO ANALYSIS

THIS RESEARCH EXPLORES TRENDS,  
CHALLENGES, AND KEY FACTORS THAT  
INFLUENCE WORKERS TO LEAVE THEIR  
MANUFACTURING JOBS.

# OVERVIEW

Recognizing the inherent magnitudes of complexity within the manufacturing sector underscores one of its most remarkable aspects. This intricate industry comprises a diverse array of educational backgrounds and experiences. The current industry in the US, and more specifically Ohio, is a result of decades of history, global and domestic, leading up to this moment. The situation at hand of attracting talent and retaining this talent is a complex issue requiring an understanding of what the current labor market wants out of their work, their expectations, and how to match them, as well as ensuring that the manufacturing industry can support them in reaching their goals in terms of career growth.

This report aims to answer the question, "**What causes people to leave their employer and/or the manufacturing industry as a whole?**" This will be achieved by conducting a meticulous analysis of the data available. To answer this question, the perspective of the people employed by the industry must be understood. After conducting secondary research from other reports, conducting social listening, and analyzing data gathered by the O.Y.E. solution, the following themes are apparent and reflect the values of those entering and already in the manufacturing industry:



The manufacturing industry post-globalization is **closely tied to geopolitical events**, pivotal moments shaping the course of the manufacturing industry, meaning those with a job in the Industry watch politics and occurrences worldwide with a close eye, such as outsourcing, automatization, regulations, etc.

Those in manufacturing, the trades specifically, also **take great pride in their work**. This is built into their work ethic and how they view their relationship with the company they work for.

Given that the industry can shift drastically due to geopolitical events and global pandemics, as witnessed by those currently employed, **job security never seems to be guaranteed**, and the possibility of layoffs is ever-present. Consequently, individuals within this industry aim to broaden their skillset to be flexible, enhancing their adaptability and enabling them to seamlessly transition to alternative roles when circumstances necessitate.

The **manufacturing industry has become powered by tech and software**, meaning that those in the Industry, even in entry-level jobs, will need to overcome any obstacles regarding this - if they have problems with tech, to begin with. However, being the digital natives that Gen Zers are (and how tech-savvy Millennials are), they seem to have a **strong interest in utilizing tech to complete projects**, whether it's as a machinist or an engineer.

**Collective bargaining** continues to be a subject of intense discussion both within and beyond the industry. The concept of a union, its potential benefits for employees, and its actual impact diverge significantly depending on the perspectives of the individual being asked, their role within the context, and their historical background.

The **generational divide has become more pronounced due to the evolving perception of what constitutes a career** and the strategies employees employ to advance in their professional journeys. Younger generations prioritize careers that harmonize with their desired lifestyles and are more willing to depart from positions that do not align with their life choices. On the other hand, older generations often have familial responsibilities that make job-hopping less feasible, prompting them to reassess their avenues toward an improved quality of life. Consequently, **both demographics have devised distinct tactics to enhance their earning potential**.

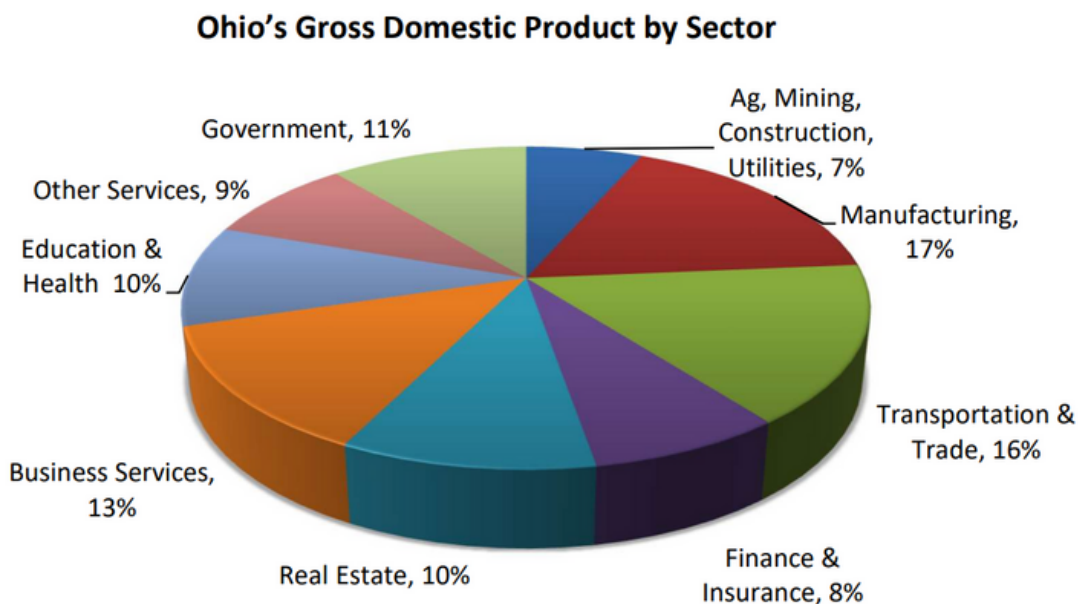


# HISTORY & CURRENT EVENTS

## BACKGROUND

### ECONOMY

To make sense of the current trends and challenges, we delve into the values of each job level group: the entry-level and mid-senior levels. Furthermore, we undertake a comprehensive examination of this scenario **using the framework of generational analysis**. This enables us to intricately compare and contrast the values of the older generation against the incoming generation poised to succeed them.



*Figure 1: Office of Research, Ohio, 2020*

**Manufacturing accounts for 17% of the gross domestic product** of Ohio's economy and gives Ohio the rank of the seventh largest economy in the United States. As the manufacturing industry continues to advance, with companies such as Intel and Honda growing their presence in new or expanding factories, it's an industry that needs the labor to fill the roles necessary to be successful. Nevertheless, as the workforce undergoes a transition, with Gen Z and younger millennials stepping into pivotal roles, the approach to talent attraction and retention must undergo a transformation to align with the evolving requisites and desires of the labor landscape. This understanding will be crucial to the success of the growing manufacturing industry in Ohio.

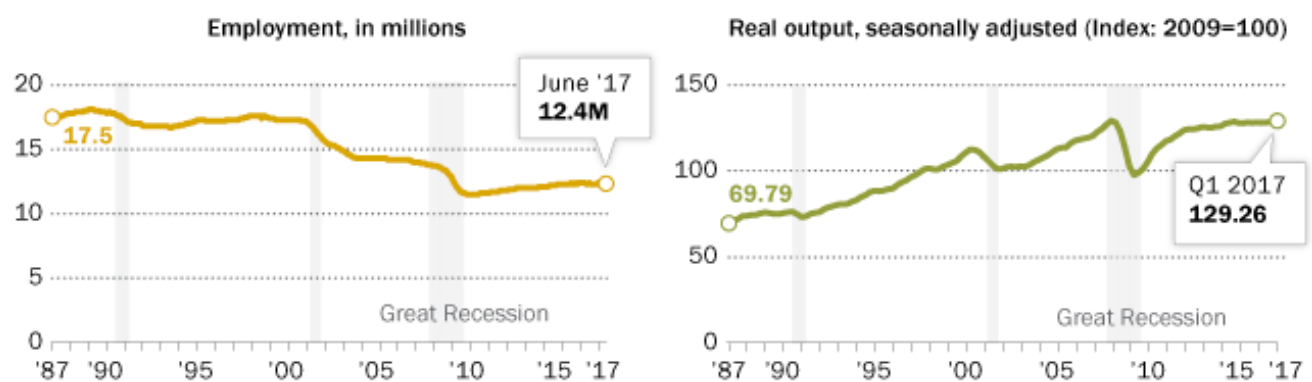
# HISTORY & CURRENT EVENTS

A point of data to inquire about is that **although manufacturing jobs are down, output has grown leading up to 2017** (Pew Research, 2017), hinting that the jobs necessary for the success of manufacturing have been consolidated but have become more efficient and effective. With the heavy integration of technology into the manufacturing process, and thus the skills necessary to operate the machinery and software, education and experience are the greatest assets an employee could have to succeed in the industry.

However, with the global COVID-19 pandemic in 2020 and the subsequent disruptions to the global supply chain and manufacturing industry, **stability in the industry has been shaken, leading output of the industry to grow and shrink drastically**. The economics of the manufacturing industry has been affected by the economy at large and “the failure of two major banks earlier this year, leading banks to tighten lending standards” and thus investments (Reuters, 2023). What this means for the industry is that as the talent pool contemplates entering the industry to begin or continue a career, they’re witnessing the risk of doing so by observing the same trends as displayed here.

## Manufacturing output has grown over the past three decades, even as payrolls have shrunk

*Manufacturing monthly employment and quarterly real output, 1987–2017*



Source: Bureau of Labor Statistics

**Figure 2:** Pew Research, “Most Americans...”, 2017

# HISTORY & CURRENT EVENTS

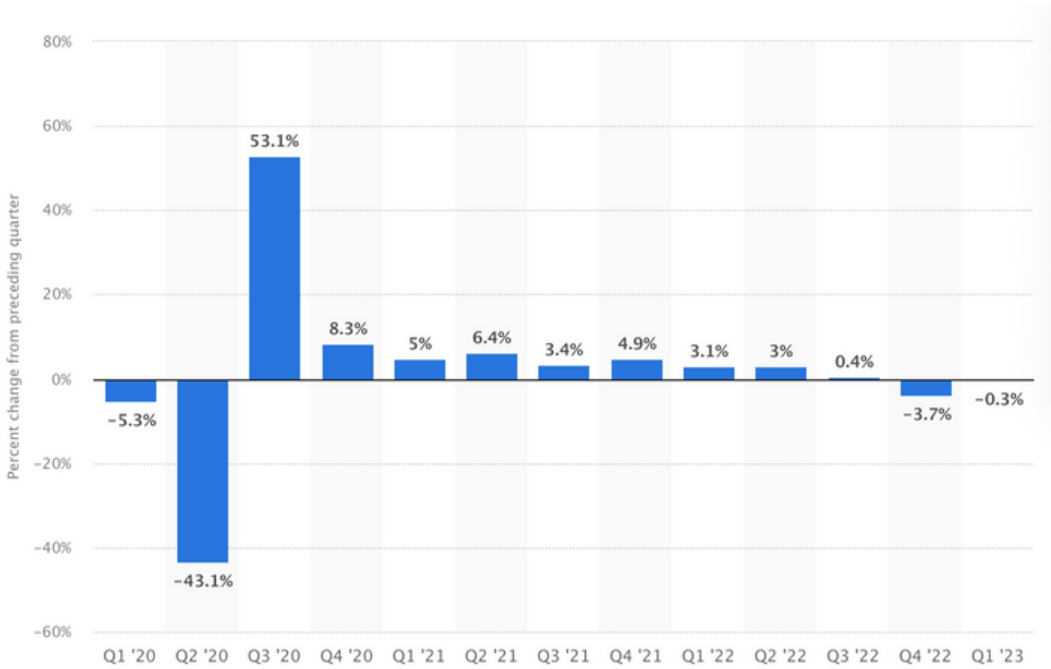


Figure 3: Statista, “Manufacturing Sector...”, 2022

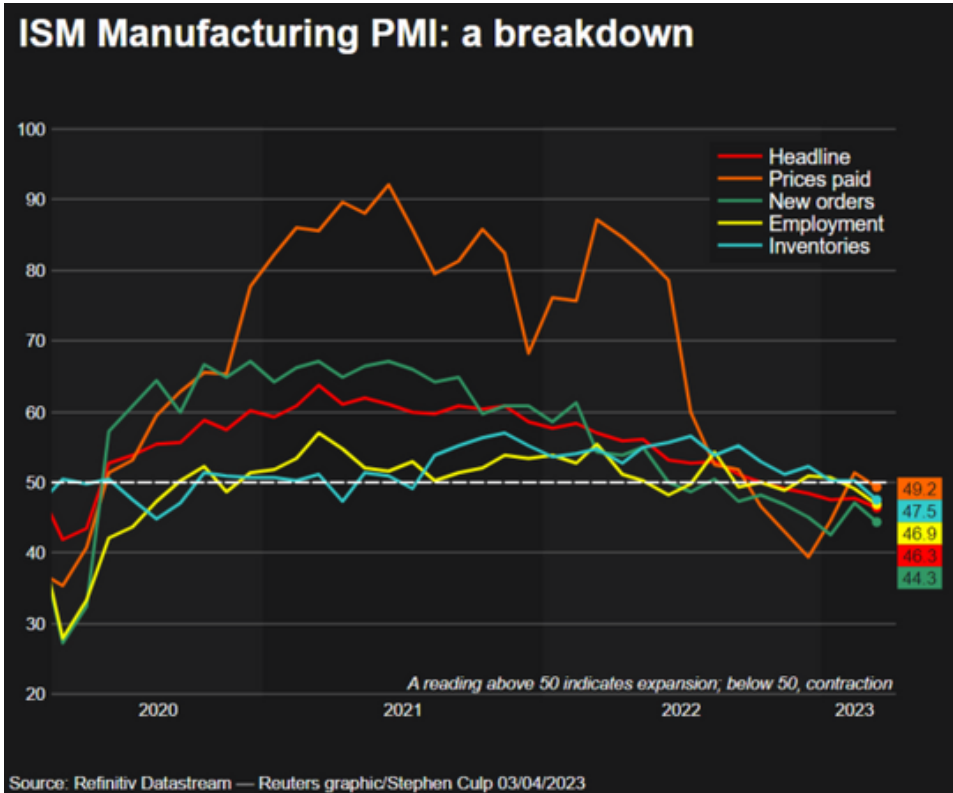


Figure 4: Reuters, “US manufacturing...”, 2023

# HISTORY & CURRENT EVENTS

Among the **most challenging job categories** for manufacturers to fill are positions involving **production workers, engineers, and middle-skill workers**. Unfortunately, the engineering sector of the industry is facing a dilemma as college enrollments in engineering have plateaued, with a decline in the number of individuals interested in pursuing this field. Notably, the most prestigious engineering programs that full-time international students are currently enrolling in **are ranked as follows** (figure 5):

What does this mean for the industry at home then? It stands to show that **for international students, engineering may pose as a strong career choice** as they aim to compete for a career here in the U.S. or find one back in their home country. However, what is interesting regarding students at home in Ohio is that among the undergraduate population at the universities with the highest enrollment (Ohio University, Ohio State University, University of Cincinnati, & Kent State University) engineering was a top 10 field of study at only two

of the four. By comparing the largest sectors of their economies against the interest in engineering among university student majors, the University of Cincinnati stands out where manufacturing is a major sector of the industry and holds the fifth largest amount of workers (122,800) behind trade/transportation (228,100), business services (189,000), education (172,200), and government (122,200) (US Bureau of Labor Statistics, 2023). Following the trend then of identifying the regions of Ohio where manufacturing is a major part of a region's economy, we see that **interest in studying engineering and ranking as a top 10 field of study choice** follows regions where manufacturing is a prominent sector of the economy, such as the Lake Erie region of Ohio (Toledo-Cleveland-Akron).

## Full-time international graduate students by field in 2019

Over the past two decades, the number of international students in electrical engineering increased by 130%

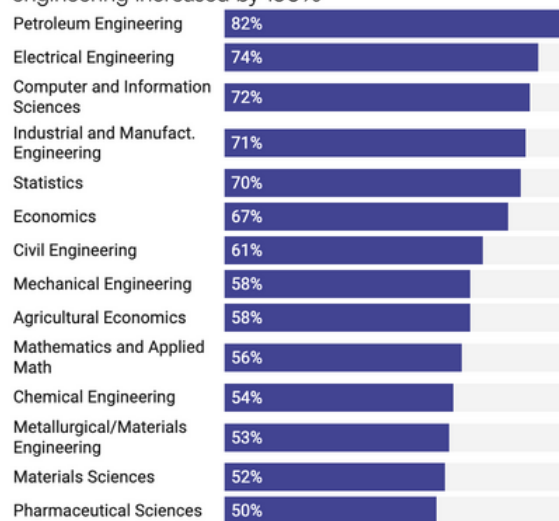


Chart: Megan Ruggles / Manufacturing Dive • Source: National Foundation for American Policy • Get the data • Embed • Download image • Created with Datawrapper

**Figure 5:** Megan Ruggles, "The 3 jobs manufacturers are struggling to fill in 2023", Manufacturing Dive, 2023

# HISTORY & CURRENT EVENTS

## Ohio University Majors

Ten Most Popular Majors for 2021 Graduates

Registered Nursing/Registered Nurse	33%
Marketing/Marketing Management, General	4%
Psychology, General	4%
Speech Communication and Rhetoric	3%
Business Administration and Management, General	3%
Zoology/Animal Biology	3%
Business/Managerial Economics	3%
Early Childhood Education and Teaching	2%
Liberal Arts and Sciences, General Studies and Humanities, Other	2%
Journalism	2%

**Figure 6:** Ohio University Academics, U.S. News, 2022

## Kent State University Majors

Ten Most Popular Majors for 2021 Graduates

Business, Management, Marketing, and Related Support Services	23%
Health Professions and Related Programs	16%
Education	8%
Visual and Performing Arts	7%
Psychology	6%
Communication, Journalism, and Related Programs	6%
Biological and Biomedical Sciences	5%
Homeland Security, Law Enforcement, Firefighting and Related Protective Services	4%
Social Sciences	4%
Computer and Information Sciences and Support Services	3%

**Figure 7:** Kent States Academics, U.S. News, 2022

## University of Cincinnati Majors

Ten Most Popular Majors for 2021 Graduates

Business, Management, Marketing, and Related Support Services	21%
Health Professions and Related Programs	14%
Engineering	13%
Visual and Performing Arts	7%
Biological and Biomedical Sciences	7%
Communication, Journalism, and Related Programs	6%
Computer and Information Sciences and Support Services	5%
Education	4%
Social Sciences	4%
Psychology	4%

**Figure 8:** University of Cincinnati Academics, U.S. News, 2022

## The Ohio State University Majors

Ten Most Popular Majors for 2021 Graduates

Finance, General	6%
Psychology, General	6%
Speech Communication and Rhetoric	5%
Biology/Biological Sciences, General	4%
Computer Engineering, General	4%
Marketing/Marketing Management, General	4%
Allied Health and Medical Assisting Services, Other	3%
Accounting	3%
Registered Nursing/Registered Nurse	3%
Econometrics and Quantitative Economics	2%

**Figure 9:** Ohio State Academics, U.S. News, 2022

## University of Toledo Majors

Ten Most Popular Majors for 2021 Graduates

Business, Management, Marketing, and Related Support Services	25%
Health Professions and Related Programs	18%
Engineering	17%
Education	5%
Engineering/Engineering-Related Technologies/Technicians	4%
Biological and Biomedical Sciences	4%
Homeland Security, Law Enforcement, Firefighting and Related Protective Services	4%
Multi/Interdisciplinary Studies	3%
Parks, Recreation, Leisure, Fitness, and Kinesiology	3%
Communication, Journalism, and Related Programs	3%

**Figure 10:** University of Toledo Academics, U.S. News, 2022

The insight drawn from this is that the closer students are to the real experience of the manufacturing industry, the better they can see themselves fitting in the workforce and understand perhaps what opportunities the industry holds for them and their interests.

# HISTORY & CURRENT EVENTS

## BACKGROUND

### PAST & CURRENT EVENTS

In the 1980s and '90s, the US pushed for college education and for students to pursue 4-year degrees that educated them to become white-collar workers, in this context: engineers. This shift has significantly **diminished the labor pool available for skilled trades**, creating a void that must be addressed in the times ahead. Currently, we are witnessing the repercussions as there is a **notable scarcity of tradespeople**, compounded by a reluctance among younger generations to pursue careers in manufacturing and the trades.

*"It's a War. "As industrialists began to export factory jobs...mostly worked by men, to poorer countries, new opportunities for American workers arose in industries like retail, health care, education, & food service... jobs...mostly worked by women, the wages were lower..."*

#### Middle skill workers

After decades of pushing college education, the U.S. is experiencing a shortage of tradespeople.

The scope of these positions is vast, with experts calling out everything from electrical, mechanical and automation technicians, to CNC machinists, welders and maintenance mechanics.

The labor gap among these roles is exacerbated by a rising need for technical specialists who can work with automation.

**Figure 11:** Manufacturing Dive "The 3 jobs manufacturers are struggling to fill in 2023"

Factory work and manufacturing have encountered challenges in attracting younger generations, often **perceived as an unfavorable career choice due to concerns about inadequate wages and opportunities** for savings, perceived safety risks, and a lack of inherent job satisfaction and purpose.

When looking for a new job, those in Gen Z are constantly bombarded with social media posts, news articles, and conversations highlighting **the "indifferent" disposition of businesses and managers towards entry-level or lower-tier roles**. As media narratives recount the indiscriminate dismissal of white-collar and blue-collar workers, instances of employee mistreatment, and even some tragic instances of minors losing their lives in workplaces (Figure 4), a prevailing sentiment among Gen Z is that their worth to the companies they serve is negligible. Consequently, **they adopt a mindset that prioritizes self-interest**.

# HISTORY & CURRENT EVENTS

## 16-year-old boy dies in accident at a Mississippi poultry plant

It's the second time in two years that a worker has died from injuries sustained in an accident at the Mar-Jac poultry facility.

Figure 12: NBC News, 2023

“I need a job that will come out with money, otherwise college will be a waste”, says Marcus, 17. “I want to pick a career that is stable.”

Figure 13: Finch, *What Is Generation Z, And What Does It Want?*, Fast Company, 2015

As a generation recently entering the workforce with entry-level jobs, they are also making entry-level wages, which simply is not cutting it. **The American dream is still alive and well with Gen Z.** They want to find a career– that is absolutely true.

In light of the escalating expenses associated with college education and the uncertainty surrounding job prospects for graduates, those embarking on their professional journey must consider avenues to acquire skills conducive to long-term career development. For individuals unfamiliar with the intricacies of the manufacturing sector, the **prevailing stereotype of factory work not only depicts it as unenjoyable, low-paying, and unstable but also characterizes it as unsafe.**

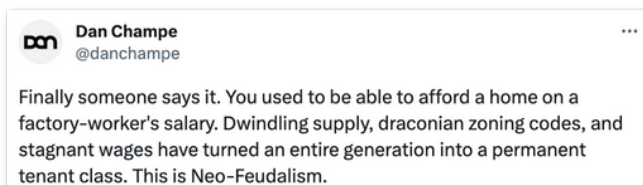


Figure 14: Twitter post by Dan Champe, 2022



Figure 15: Twitter post by Muckraking Ohio, 2023

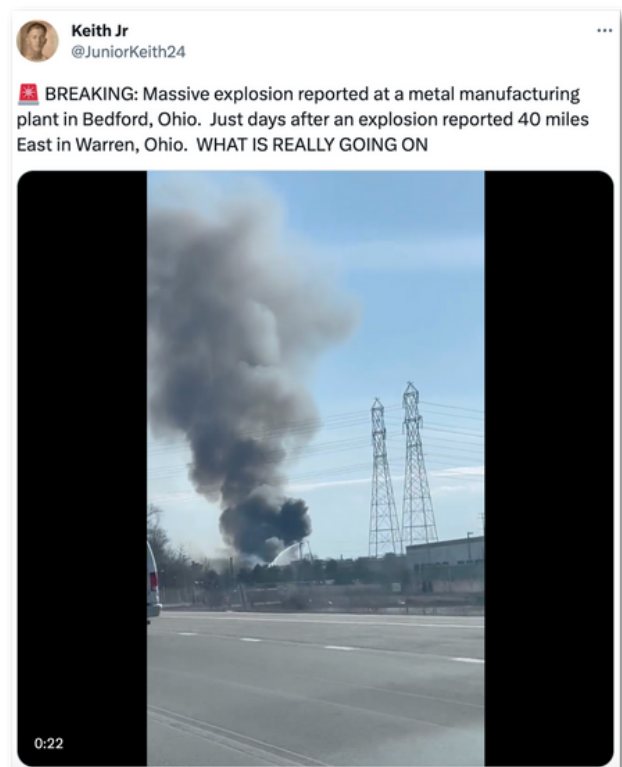


Figure 16: Twitter Post by Keith Jr, 2023

# INDUSTRY & TECH

For those familiar with the industry, however, a vision emerges of the promising careers that can be forged within the trades. As previously highlighted, the manufacturing sector remains in a perpetual state of **technological integration**, requiring skilled individuals proficient in operating these advanced machines and their accompanying software. The imperative for the manufacturing sector lies not in focusing on what this emerging generation might fail to grasp about the industry but rather in **leveraging their inherent strengths, particularly their affinity for technology**.

**“I think the old vision of what a manufacturing job was: that it was dirty and low tech is simply not true today,” DeWine said. “It’s high-tech. One of the keys to our future is filling these jobs.”**

**Figure 17:** Leopard, *Hiring struggles continue for Ohio’s manufacturing industry*, News 5 Cleveland, 2021

The new workforce needs to understand a fundamental truth about the manufacturing industry: while certain segments may retain a **perception of being "dirty and low-tech,"** the predominant landscape offers an arena where they can apply their skills and find purpose by engaging in pursuits that genuinely captivate their interests.

*"Learn How Robots are Transforming Manufacturing? The advent of robots is influencing practically every sector, with Robots are Transforming Manufacturing being the most affected. "*



**Figure 18:** Twitter post by C-TEC of Licking Co., 2023

**Gen Z has been described as the first true digital natives**, describing their close and integral relationship with tech. What this means is their interest in finding ways to bring this together with their work, whether it be within an office setting or the realm of manufacturing. What is evident here is **the sense of pride exhibited by students as they bridge the gap between manufacturing and technology**, forging a stronger connection between the two disciplines.



# HEALTH INSIGHTS

The concept of health is universal, but its interpretation varies among those in the manufacturing industry due to potential risks and the nature of the job. Older generations often face physical health decline with common complaints about back and knee injuries, a trend seen in younger generations too. Surprisingly, there's a split—some find factory work simple, while others stress. **Addressing these concerns is vital for retaining talent as their role influences their perception of the industry.**

## Physical demands contribute to chronic pain

The physical demands of manufacturing work can contribute to chronic pain. Because of the repetitive nature of the work, doing the same movements over and over can put stress on particular joints being used. According to a study done on heavy lifting's correlation to chronic pain in BMJ Journals, physical tasks like squatting, kneeling, climbing, and lifting can cause pain and worsen pain that already exists.

**Figure 19:** Barton, Hinge Health, 2020

While the effects might be more evident among experienced veteran employees who have been exposed to the rigors of manufacturing, both younger and older workers share the challenge of managing their physical health in the context of their manufacturing roles.

*"We can talk about unnecessary risk, injuries, and the workers compensation process another time, but the people who do this work deserve access to covered mental healthcare services no questions asked for this reason, and many others"*

**Alongside physical health is mental health**, something that is experienced by all but seems to as a higher priority among Gen Z. Mental health can be described as a "fogging of the brain" or severe stress, as exemplified below. The balancing act for Gen Z between life, work, and basic care (food and shelter) has been intensified by economic pressure as they begin their careers. They are not afraid to find something that balances their lives and ensures they are not physically, mentally, or emotionally rundown.

Gen Z might be the most emotionally in-tune generation yet. According to The New York Times article, "The 37-Year-Olds Are Afraid of the 23-Year-Olds," this generation is more inclined to prioritize mental health. One manager reported that Gen Z employees will call in sick if they do not feel well mentally. Gen Z is also cautious of insensitive or inflammatory language yet stretches the boundaries of professional conversation. Additionally, this generation is highly passionate about social issues and expects/urges employers to take social responsibility.

**Figure 20:** Emerald EMS, *Generation Z in Manufacturing*, 2022

# HEALTH INSIGHTS

*"Well..... you are aware of the impact factory animal farming has on the environment and it's contribution to climate change. That impacts your health."*



Figure 21: Twitter post by Jamir Valentine, 2023

What can be taken from the post to the left from a Twitter user in Ohio, is the **desire to have what is perceived to be a simpler life**. Choosing not to engage in office work means sidestepping the stress associated with it, and instead opting for an industry that involves physical labor, thus avoiding the mental strain often linked with office jobs.

However, for others in Ohio, **the stress of being in a factory** can be enough to trigger nightmarish feelings.



Figure 22: Twitter post by kotn, 2023

Despite these sensitivities, Gen Z is certainly not "soft." These individuals are not afraid to speak up or defy the workplace hierarchy. Members of this generation will not think twice about leaving their employers, either. LinkedIn found that Gen Z's job transitions have increased by 80%. In contrast, the increase in job transitioning by Millennials went up by 50%.

Figure 19: Emerald EMS, *Generation Z in Manufacturing*, 2022

Although Gen Z is a hardworking generation eager to learn and develop a name for themselves, they also value taking time for self-care and ensuring their health is a priority. The stress induced by the current economic uncertainty means that **their next career move must be one that alleviates this experienced pressure**, helping to clear their path and align their work with personal well-being.

# CAREER & SKILLS



**The younger generation entering the workforce still values career development**, though the definition of a career may have evolved across generations. This shift impacts the strategies employed by Gen Z and younger millennials as they chart their paths. Following the downsizing of the US manufacturing sector according to the US Bureau of Labor Statistics, trust in stable careers and earning a decent living has diminished. A lack of familiarity with the manufacturing industry can be traced back to a historical absence of personal connections within the sector. That said, **there is an opportunity to educate emerging generations about the diverse opportunities** encompassed under the "manufacturing" umbrella and how these align with their interests.

Not only does the manufacturing industry provide many foot-in-the-door opportunities, it provides many different areas for you to work in. From aerospace, food production, textiles, to pharmaceuticals, manufacturing spans the spectrum. You can choose to work in a field you're passionate or curious about.

**Figure 23:** Terra Staffing Group, *5 Reasons to Start a Career in Manufacturing*, 2021

According to Robert Half, what we do know about Gen Z, in general, is that although most deem flexible hours and remote work are important, what matters most to them are "**career advancement opportunities, a manager they can learn from, and professional development and training opportunities**" (Robert Half 2018). The need for skilled individuals is also growing with the growing integration of technology into the manufacturing process. Pairing this industry change with the high interest and integration of tech into their own lives, this is the perfect opportunity to speak to Gen Z with tech, career advancement, and upskilling along the course of their career in mind.

“There’s no such thing as a low skilled job in manufacturing anymore,” Moutray said. “To really thrive, we’re going to need continuous learning and upskilling.”

**Figure 24:** Megan Ruggles, Manufacturingdive, *The 3 jobs manufacturers are struggling to fill in 2023*, 2023

# CAREER & SKILLS



Developing a career is still important for the younger generation of incoming workers. However, what it means to have a career has shifted. How Gen Z and younger millennials have developed their tactics to carve out a pathway for themselves looks different compared to previous generations. **After the downsizing of the US manufacturing industry, confidence in stable careers and earning a decent living has diminished.** The manufacturing industry's complexity is partly due to limited personal connections, rooted in its history. That said, it is vital to educate the next generation about the various options under the "manufacturing" umbrella and how these align with their interests.

Providing clear career paths, mentorship programs, and educational assistance proves to young candidates that a business values their long-term potential over the ability to simply fill an entry-level role. Part of an Industry 4.0 roadmap is continuous monitoring and improvement, which gives employees a chance to play an active role in achieving quantifiable benefits and impacting the company's bottom line. Additionally, investing in an internal talent pool reduces the time and money lost through constant turnover and re-training. If new candidates feel like a manufacturing role is stagnant and disengaging, they won't hesitate to look for a new job.

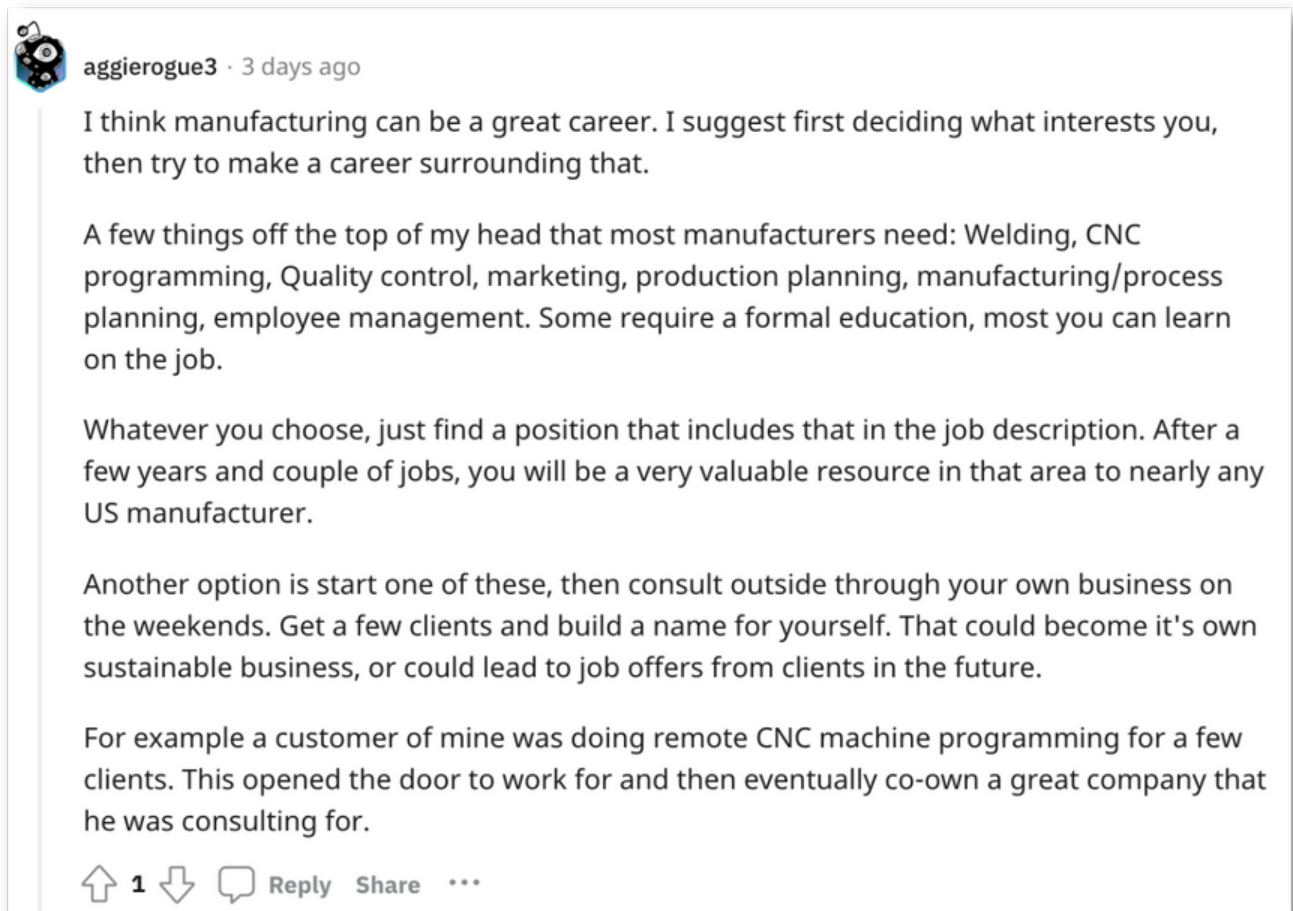
**Figure 25:** Terra Staffing Group, *5 Reasons to Start a Career in Manufacturing*, 2021

What the incoming generation needs in order to make the decision easier of whether or not to enter the manufacturing industry is a clear cut pathways to success. The drive to succeed is apparent, but in an uncertain economy, what is missing is a sense of certainty.

*"It seems like everyone is talking about "Disruptive" technology these days; but who is genuinely disrupting manufacturing? I'm talking about fundamentally changing the inputs to production, process, lead time, cost, and skillset required to produce common goods?"*

The post below highlights the **potential to acquire valuable and adaptable skills, applicable across various sectors within the industry.** While this might appear obvious to some, the wide range of possibilities can be overwhelming and lacks a straightforward route to success. However, for others, this adaptability might be the key to industry survival. Nonetheless, the knowledge gained and applied to personal ventures is passed down through generations.

# CAREER & SKILLS



**Figure 26:** Response by aggierogue3 to Zattack69 on Reddit, 2023

For preceding generations, a career development approach often involves learning industry norms and practices as an employee and then leveraging this experience to establish their own businesses. This shift allows them to maximize earnings for their time and expertise.

Within the mid- to senior-level demographic of the industry, a distinct form of entrepreneurship emerges. Here, individuals possess not only their skills but also ownership of a business, ultimately enhancing their income prospects. This insight sheds light on the potential available to newcomers entering the field and **may explain the departure of skilled tradespeople from the industry.**

# CAREER & SKILLS



Figure 27: Response by bobobedo to Zattack69 on Reddit, 2023

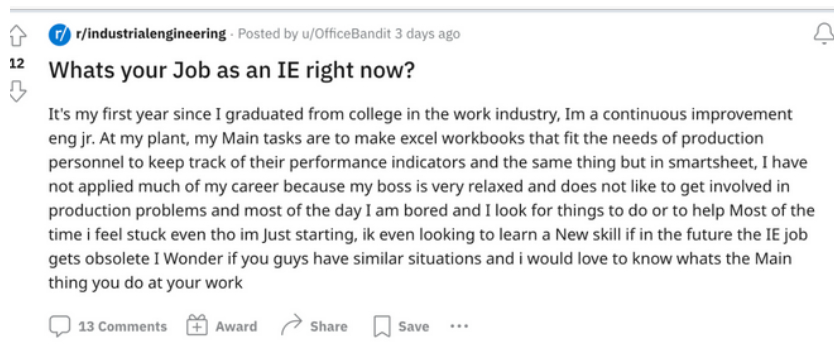


Figure 28: Reddit post by OfficeBandit on r/IndustrialEngineering, 2023

Whether it's a blue-collar or white-collar role, the requirement for **a job that resonates with personal interests, imparts a sense of purpose, and offers versatile skills applicable across diverse industries is crucial.** This necessity

extends even to industrial engineers, who must possess skills transferable to other domains in the event of a significant shift within the global manufacturing landscape.

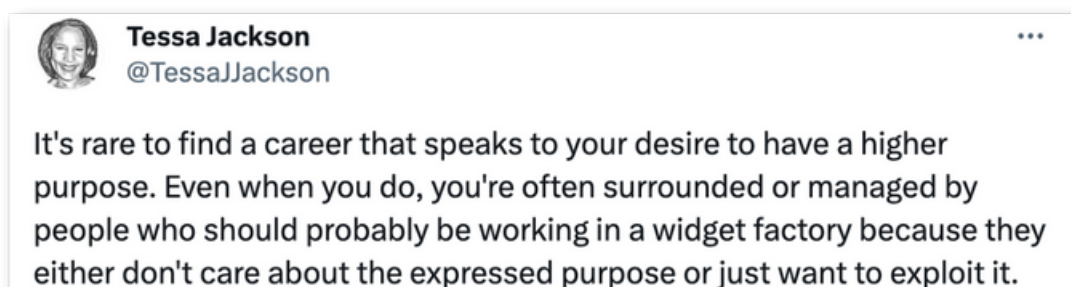
Whether one delves into fields such as petroleum or electrical engineering, computer or data sciences, the ability to carry that knowledge and skill set seamlessly from one job to another gains paramount importance. Similarly, the skills acquired within the manufacturing sector must be competitive, recognized as transferable assets, and not a dead end in case of job loss.

While some may already grasp this insight due to personal connections within the industry, those entering without prior knowledge must be able to discern the **advantages of investing time and resources in learning these adaptable skills.**

Another component of developing a meaningful career for members of the newer workforce is **not only having an interest in a subject but also being able to master and own the skills necessary to complete their jobs.** To exemplify this point, consider the realm of **welding**—a vocation situated at the intersection of industry and art—showcasing the significance of skillful expertise in a career, particularly one within the manufacturing sector.

# CAREER & SKILLS

*"This fella was so focused this spring in our Robotics and Automated Manufacturing program that he did not realize I was there for a while. It was interesting to observe his work. #skillsmatter #CareerTechOhio"*

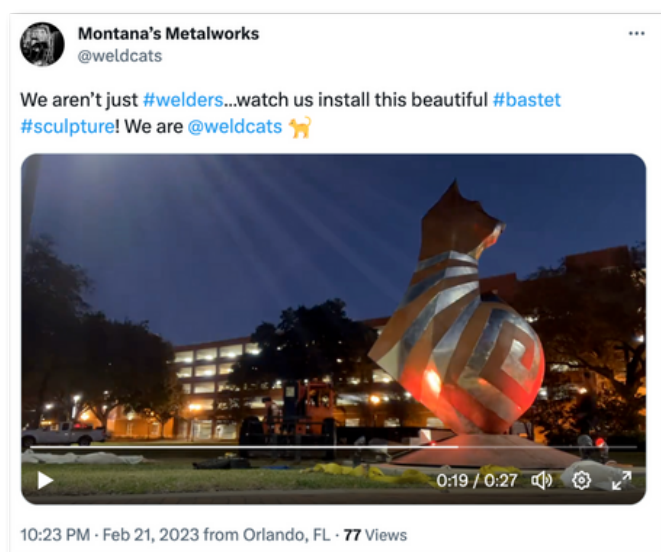


**Figure 29:** Tweet by Tessa Jackson, 2023

The ability to weld may not be seen as simply something that can be used to develop a career but something that gives them purpose, something that they enjoy, and something to take pride in. For example, those interested in welding for the sake of art see their skill as artistic, but the same could be said about someone welding for the manufacturing Industry - **something perfected to the point of becoming art and something in which to take pride.** The ability to wield this craft is something shared across generations and is still alive in younger generations.



**Figure 30:** Twitter post by Foghorn Fan Barnyard Biker in response to Theresa, 2023



**Figure 31:** Montana's Metalworks sharing their work on Twitter, 2023

# GLOBAL PERSPECTIVE



coldpoint555 · 15 days ago

Use the [search bar](#) on [r/Machinists](#). Frequent question about pay/conditions for CNC Machinist. I'm not from USA but the pay depends on industry and location. Machining in Oil/aerospace/Defence/tool making/repairs would pay the most. You can make good money in some places but electricians/hvac/repair guys will make double that. It's somewhat underpaid trade because of globalism. I myself am looking into IT which would pay double/triple what i currently make after 5 years of experience. Just do your own research. I heard Australian machinists are killing it wage wise. It depends on location.

**Figure 32:** Post by coldpoint555 on r/antiwork on Reddit, 2023

In a world where everything is connected globally, the manufacturing industry is no exception. People in this field closely watch what is happening at home and in other countries. **They pay attention to the politics and events in different parts of the world, which can be worrying.** They are tuned into how these events might affect their jobs, homes, and cities, even if they're happening on the other side of the world.

This has caused a wave of strong opinions regarding large semiconductor chip manufacturers that are returning to the U.S. and Ohio.

These massive chip companies have absolutely zero loyalty to their employees or community. They are very good at setting up factories in SE Asia, are extraordinarily cost conscious, and will only do business here when market forces dictate it. I understand *why* the government wants us to have a stronger domestic chipmaking capability, but it's truly aggravating that we gave enormous subsidies to some of the richest companies in the world. In turn, they will setup shop in geographic locations they don't actually want to be located, and then do everything possible to drive down costs in that market.

**Figure 30:** Post by Freedommachine on Practical Machinist forum, 2023



Adam Davis  
@BamaRailfan

I work in manufacturing. Fortunately I'm in quality control so I'm immune (for a while) from automation. Many of my coworkers on the plant floor, however, could be made obsolete at any time. 1-2

**Figure 33:** Twitter post by Adam Davis, 2022

**The desire to enter an industry diminishes when there is a substantial risk of your job becoming obsolete.** This outlook changes if you specialize in a particular niche within the industry or if you're aware that, based on the global pay standards, you're earning a competitive wage compared to others in the worldwide field. However, this might not hold true when measured against earnings from alternative career paths within your own country.



# GLOBAL PERSPECTIVE

However, this sentiment extends throughout various aspects, encompassing political ideologies and apprehensions concerning unions, presidential agendas, and the overall economy. What is particularly intriguing is the inclination observed on both ends of the spectrum. Evident is the endorsement from Democratic and Republican presidents for their respective efforts aimed at enhancing manufacturing prospects and wage conditions. The subsequent instances highlight **the manufacturing expansion during President Trump's tenure and the wage upturn under President Biden's leadership**. It's worth highlighting that the CHIP Act, enacted during the Biden administration, stands as a testament to bolstering semiconductor chip manufacturing within the United States.



**Figure 34:** Twitter post by OndaDiabhal, 2023



**Figure 35:** Twitter post by Joseph Martin, 2023



**Figure 36:** Twitter post by Kevin Kamphaus, 2023

# GLOBAL PERSPECTIVE



However, at this point in history, we are witnessing the global shift of a demanding Industry back to the United States. As a result, the manufacturing sector is in the midst of a transformative phase to align itself with this paradigm shift. In light of this, **it presents an opportune moment to demonstrate to the younger workforce the immense potential inherent in pursuing a career within an evolving economic landscape.**

It will strengthen American manufacturing, supply chains, and national security, and invest in research and development, science and technology, and the workforce of the future to keep the United States the leader in the industries of tomorrow, including nanotechnology, clean energy, quantum computing, and artificial intelligence. The CHIPS and Science Act makes the smart investments so that Americans can compete in and win the future.

Micron is announcing a **\$40 billion** investment in memory chip manufacturing, critical for computers and electronic devices, which will create up to 40,000 new jobs in construction and manufacturing. This investment alone will bring the U.S. market share of memory chip production from less than 2 percent to up to 10 percent over the next decade.

**Figure 37:** The White House, *FACT SHEET: CHIPS and Science Act Will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China*, 2022

Regarding collective action, unions' roles transformed before globalization and the US manufacturing industry's offshore shift. This phenomenon is evolving. To grasp the nuances of today's workforce, **attention is crucial to the younger generation's collective initiatives.**

# SOCIAL ACTION

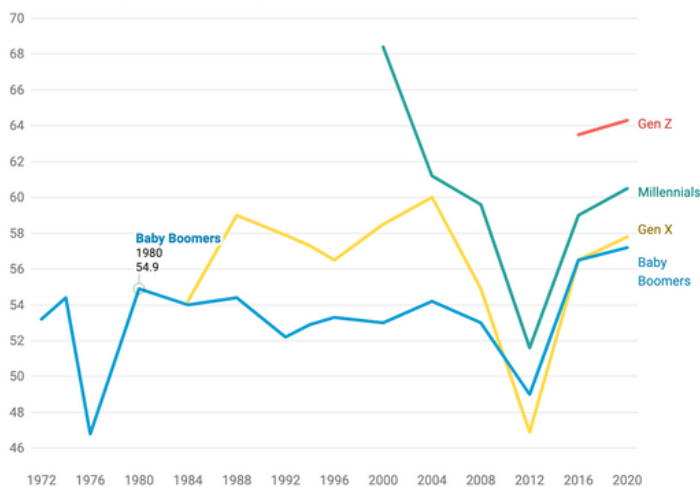
Given that **Gen Z appears consistently prepared to engage in collective action** against perceived injustices, including but not limited to climate change, social upheaval, political polarization, and economic stress (Worklife, 2022).

Global data from public-relations and research firm Edelman shows **70% of Gen Zers** are involved in a social or political cause. And although not all the 10,000 people surveyed said they would call themselves fully fledged activists, they're still highly socially involved, advocating for causes they believe in through how they spend and earn. They're the **most likely generation to boycott** a product, company, country or state because of a political, social or environmental stance, which extends to how they pick employers, too. Just **one in five** would work for a company that fails **to share their values**.

**Figure 38:** Carnegie, How Young People Are Changing the World, *BBC Online*, 2022

## Generation Z supports unions today more than older generations ever have

Mean union approval rating, by generation, 1972–2020



Hover or click to see values.

Source: American National Election Studies, "Time Series Cumulative Data File: 1948–2020," available at <https://electionstudies.org/data-center/anes-time-series-cumulative-data-file/> (last accessed June 2022).

Chart: Center for American Progress

**Figure 39:** Glass, What You Need To Know About Gen Z's Support for Unions, Center for American Progress, 2023

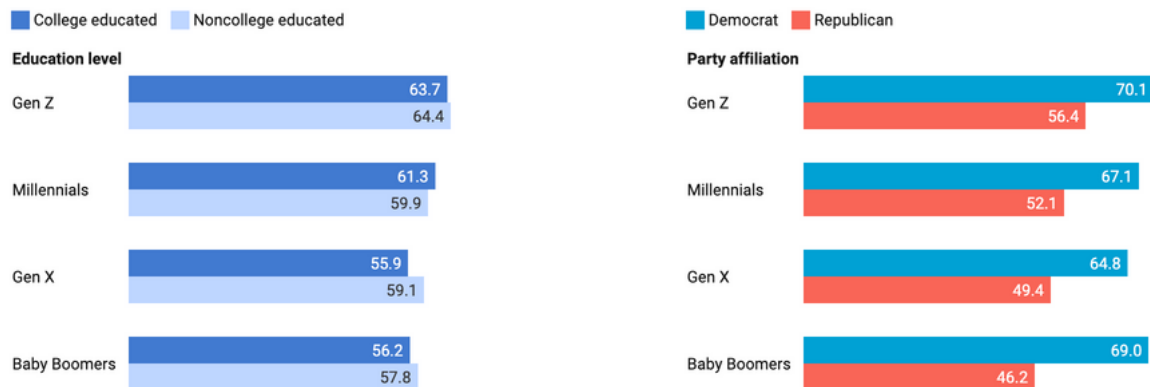
The relevance of unions lies in this generation's capacity to unite and advocate for their convictions. This contemporary movement mirrors historical **union actions** with a broader scope than mere workplace improvements – now encompassing their aforementioned values. The intricate perception of unions revolves around their influence on employees and industries, shaped by industry dynamics and leadership. **An escalating inclination of Gen Z to engage in such endeavors becomes evident.**

**Gen Zers favor unions in the workplace** as they find a voice to express their concerns. According to americanprogress.org, Gen Z favors unions more than any other generation at their age. But, **what's the breakdown of demographics, and what does this mean for employers?**

# SOCIAL ACTION

## Union approval among Generation Z crosses traditional class and ideological lines

Mean union approval rating, by generation, educational attainment, and political party identification, 2020



"College educated" includes all individuals who have received at least a four-year degree.

**Figure 40:** Glass, *What You Need To Know About Gen Z's Support for Unions*, Center for American Progress, 2023

Although the opinion of unions is more positive with those identifying as democrats, It is clear that even among Republican survey participants for the American Progress study, the numbers are higher in Gen Z than in previous generations of the same demographic. The challenge now for employers is **to align their business models with the new generation of workers or face backlash** and a lack of interested applicants.

**Zoomers:** Colloquial synonym for Gen Z.

Zoomers are also quite different in their values and attitudes. They are more racially and ethnically diverse and more comfortable using gender-neutral pronouns. They are worried about climate change and racial disparities. They value individual expression and avoid labels. They are also on track to be the most well-educated generation in terms of skills and educational attainment.

Ultimately, there is a tension between their desires and values. Over half (54%) would refuse to work at a company that does not share their values. Yet 19% would be willing to, and 27% are unsure and could potentially be persuaded to. That's as many as 46% of zoomers who could be encouraged to work for a business that goes against their values.

Clearly, personal and economic security are powerful motivators for Gen Zers. When evaluating an employment opportunity, the most important factor is the employer's commitment to providing personal growth opportunities (51%), followed by the company's values (39%) and employee package (38%). What's more, only 15% would be willing to take the risk to work for a start-up, compared to 40% who would prefer to work for an established business.

**Figure 41:** Team LEWIS, *New Rules: How is Gen Z Changing the World of Work*, 2021

# DATA ANALYSIS SUMMARY

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The question that this report aimed to answer was "*What causes people to leave their employer and/or the manufacturing industry as a whole?*" This has been accomplished by attempting to understand the motivations, challenges, sentiments, and overall experience of the workforce and **the younger generation. The new generation of workers is a strong group of people willing to do what it takes to be successful** but has been handed a tough situation where they happen to be moving into an economy that's working against them. The following Insights are drawn from the analysis.

## WHAT FACTORS ARE DRIVING MANUFACTURERS AWAY FROM THE WORKFORCE?

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- Considering the industry's historical context and the prevailing economic conditions, **both the emerging and the established mid- to senior-level workforce are compelled to pursue paths that guarantee enhanced earnings and stable careers**, even if this involves reassessing their positions within just six months. The industry's historical patterns suggest that companies tend to relocate offshore when it's financially advantageous, often leading to workforce abandonment in the US.
  - **Recommendation:** Swift decision-making and effective communication are essential when industries undergo shifts due to economic changes or historical patterns.
- **The Industry's integration of tech** is a perfect intersection between what the industry needs and the interests of those entering the workforce.
  - **Recommendation:** Given that Gen Z and younger millennials are digital natives with a strong affinity for technology, it's crucial to leverage their tech interests by customizing roles that align with these skills. This approach empowers them to excel in their domain, mastering their craft with enthusiasm.
- The inherent risks in **the manufacturing industry constantly jeopardize workers' well-being**. When combined with Gen Z's emphasis on mental and emotional health, it becomes crucial to prioritize comprehensive care.
  - **Recommendations:** Addressing both physical and mental aspects not only aids in attracting but also retaining talent effectively. Providing comprehensive benefits is the key approach.

# DATA ANALYSIS SUMMARY



- The career landscape for Gen Z has departed from tradition, yet a strong desire for career development remains within this generation. Amid the current economic and political climate, they exhibit a **willingness to switch jobs in pursuit of optimal income strategies.**
  - **Recommendations:** In the context of manufacturing, the focus should be on showcasing tasks and skills that capture their interest while demonstrating viable avenues for career growth in the field. What is essential is the provision of a well-defined career pathway.
- The manufacturing industry, given its history and global process, means that those working in the industry are aware of global and domestic events and understand that what happens in other parts of the world will impact their job at home to some degree. What this means for employers is that **employees tend to view these events through political lenses and will join or abandon a company based on their values**, both at home and abroad. The social presence of an organization will be under great scrutiny, given the interconnectedness of the world now and the pressures applied by the younger generations.
  - **Recommendations:** In light of this, it's recommended that employers in the manufacturing industry proactively engage with their workforce on global events and emphasize aligning company values with employee perspectives. A transparent and inclusive approach can help foster a positive organizational culture and address potential concerns arising from the interconnected nature of the world and the values-driven decisions of younger generations. Additionally, nurturing a strong social presence that resonates with these values will enhance the organization's appeal and reputation, contributing to both talent attraction and retention efforts.

20  
23

# SOCIAL DATA ANALYTICS REPORT



## OHIO ANALYSIS

THE FOLLOWING SOCIAL DATA ANALYTICS REPORT SEGMENTED ALL CONVERSATIONS GENERATED IN OHIO THAT TOOK PLACE ONLINE FROM JUNE 16TH, 2021, TO JUNE 15TH, 2023.

# O.Y.E PROCESS

To conduct an extensive social data analysis Nativa utilized its proprietary software, **O.Y.E. Business Intelligence**.



is a language-neutral data analytics software that provides **demographic and psychographic insights** from unstructured social data to better understand trends and behavior among different groups. The technology provides the possibility to define searches from specific keywords or hashtags and time periods. Searches gather all relevant posts and generate reports utilizing the following process:



Powered by machine learning and artificial intelligence, O.Y.E. provides unique insights and recommendations that can be leveraged to answer critical questions and make educated decisions regarding target audience behavior. **The result: better conversation, lift, and engagement.**

This report analyzes data over a 2-year period from **June 16th, 2021, to June 15th, 2023**. As the manufacturing landscape evolves, so do the challenges faced by organizations within the industry, especially concerning employee retention. The manufacturing sector's ability to retain skilled and talented employees is critical to sustaining productivity, innovation, and overall competitiveness. However, the increasing turnover rate among employees poses a significant threat to the industry's stability and growth potential.

By leveraging social listening tools and techniques, we aim to understand public perceptions, sentiments, and trends related to manufacturing jobs. By understanding the **sentiments, trends, and challenges discussed online**, it is easier to connect with potential manufacturing workers.



# VOLUME ANALYSIS

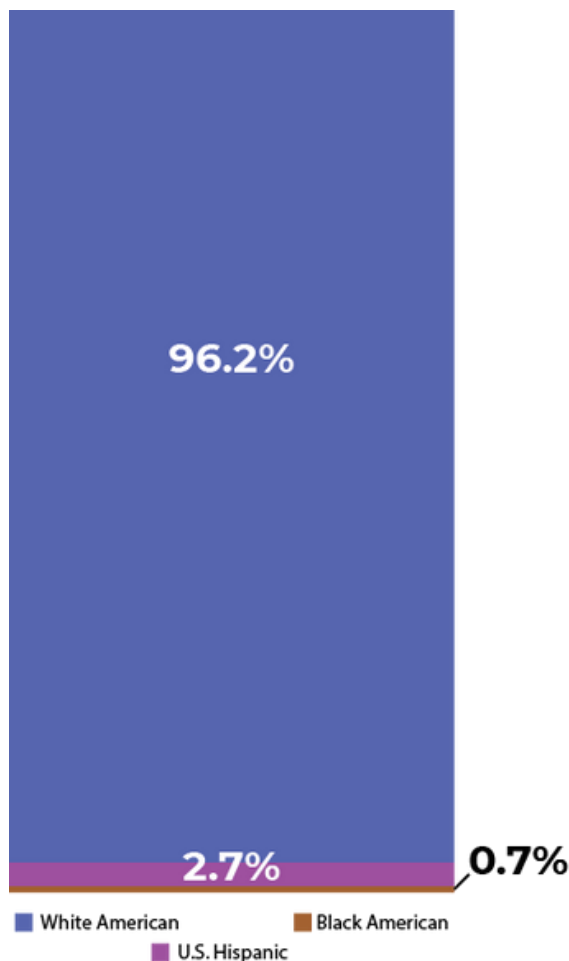
## CONVERSATION VOLUME

This report analyzes data collected over a **24-month period**, from June 16, 2021, through June 15, 2023. These online discussions were captured from Ohio across **127,163 online conversations**. Of these conversations, O.Y.E. was able to index **100,008 conversations about manufacturing** and fabrication by age, sentiment, gender, and topics.

JUNE 15. 2021- JUNE.16  
2023

# 127,163

CONVERSATIONS  
COLLECTED  
FROM OHIO



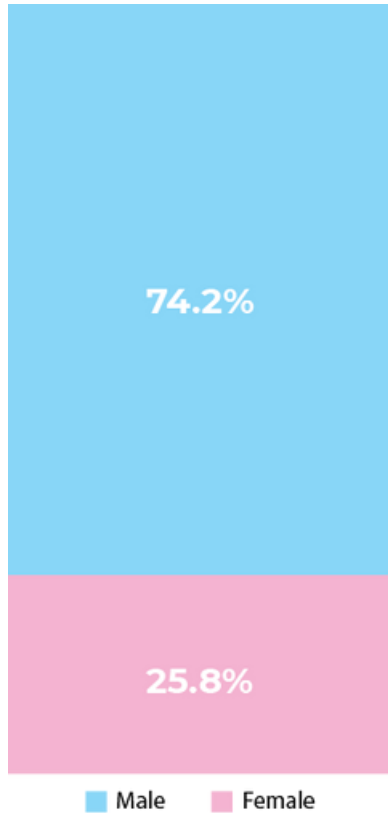
**White Americans** made up the highest portion of online conversation (**96.2%**), followed by **U.S. Hispanics (2.7%)**, and **Black Americans (0.7%)**.

- It is typical of most O.Y.E. short studies that White Americans make up the majority of the conversation.

The data will be examined in the sections below to understand how conversations from current and previous factory workers discuss factory environments and the manufacturing industry.

# GENDER ANALYSIS

## GENDER BREAKDOWN



Among all analyzed conversations, **males** accounted for the **majority (74.2%)** of online posts from Ohio discussing manufacturing, and **female** conversations **trailed at 25.8%**. This follows the gender demographics seen in the [National Manufacturing Trend](#) where female workers are less than 30% of the workforce.

When analyzing the topics discussed in male conversations, the most discussed topics were **Welder (4.2%)**, followed by **Team, (3.2%)**, **Better (3%)**, **Mechanist (2.6%)**, and **Fired (2.2%)**.

When analyzing the topics discussed in female conversations, the most popular topics are discussing **Industry (4.8%)**, **Welder (4.3%)**, **Machinist (3.5%)**, **Training (2.5%)**, and **Better (2.2%)**.

These topics indicate that males discussing manufacturing are more likely to discuss their experience while female conversations discuss the roles.

**lian baran** @LianSimilian · Jun 28, 2022 ...  
gonna move to ohio, germany wont ever get this shit done... are there any jobs for me in your town bro?

2 replies 1 like

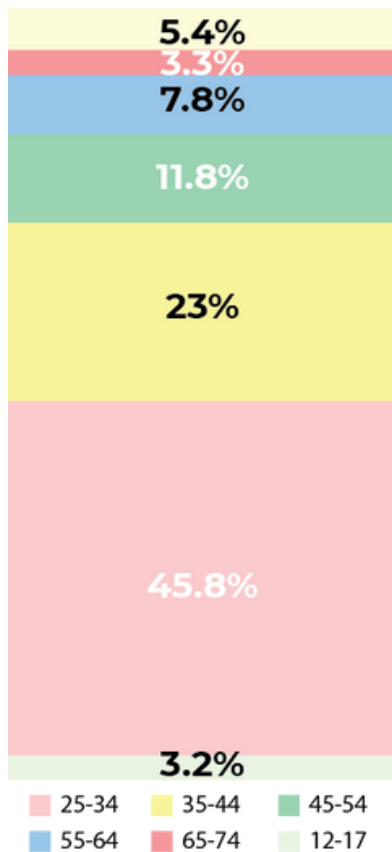
**Josephcup18** @josephcup18  
Yes our minimum wage \$15 an hour but even fast food places hire you at about 18 Factory place is about 22 to \$23 an hour

**Alicia Norton** @ASprinkles65 ...  
Pray for us in Ohio... weird shit going on  
DEVELOPING: Major Explosion Reported at Manufacturing Plant In Ohio

**Jimmy Malone,liberal** @malonespeaking ...  
I love helping young people go to college, but I also tell them that plumbers, electricians, carpenters, welders, etc have many great opportunities.

# GENERATION ANALYSIS

## AGE BREAKDOWN



The age data gathered via facial recognition in the graph at left was obtained from a sample of approximately 10,000 Online Conversations discussing the Ohio Manufacturing Industry. Only publicly available posts and images are used in this process.

The most dominant age group engaged in online discussions about the Ohio manufacturing industry is the **25-34-year-olds group, representing 45.8% of all conversations**, displaying high levels of engagement and active participation in conversations related to the manufacturing sector.

The close second was the **age group 35-44-year-olds at 23%** of their conversation overall among all conversations.

- Interestingly, this group had significantly more conversations regarding the **Unemployed** (3.7%) compared to 25-34 year-olds and compared to 25-34 year-olds at 0.9%.



**Citrus Enjoyer**  
@melteddali

We recently had a bunch of people die because they were forced by their warehouse/candle factory jobs to work during a storm that had tornado warnings forecasted. It's a national disgrace.



**The Sisco**  
@scarritt82

If you're ADHD and/or autistic and considering a job in manufacturing, thinking you'll be able to cope with the smells and the noise of the machinery, don't. You won't be able to.

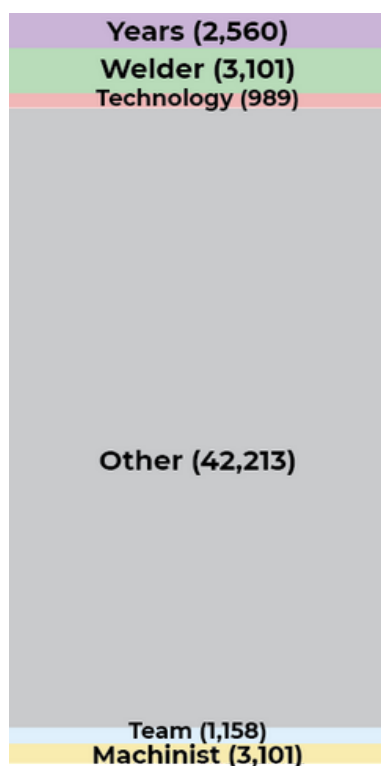


**Greg Fairchild**  
@GFairchildE

Our factory hired roughly 400 mostly millineals this year out of that over half quit, many were fired on the probationary period for call offs, lates etc. Only about 40 remain. I worry about manufacturing after we retire in the next few years.

# TOPIC ANALYSIS

## POPULAR TOPICS



From all conversations analyzed in Ohio, the graph to the left represents the most commonly discussed and recurring topics.

The top 5 categories among Ohio residents discussing factories or the manufacturing industry include **Welder (3,101)**, **Years (2,560)**, **Machinist (1,356)**, **Team (1,158)**, and **Technology (989)**.

Top topics are determined by the percentage of frequency they occur among all conversations. Topics are then organized in a hierarchy and if two topics occur in the same conversation, they are categorized with the topic highest in the hierarchy. Those conversations listed as part of 'other' did not account for more than 1.9% of all conversations.

## TOP HASHTAGS

The dominant hashtags from found the Ohio population discussing manufacturing were **centered around industry advancements and roles**. Manufacturing workers frequently used the following hashtags to engage in these discussions:

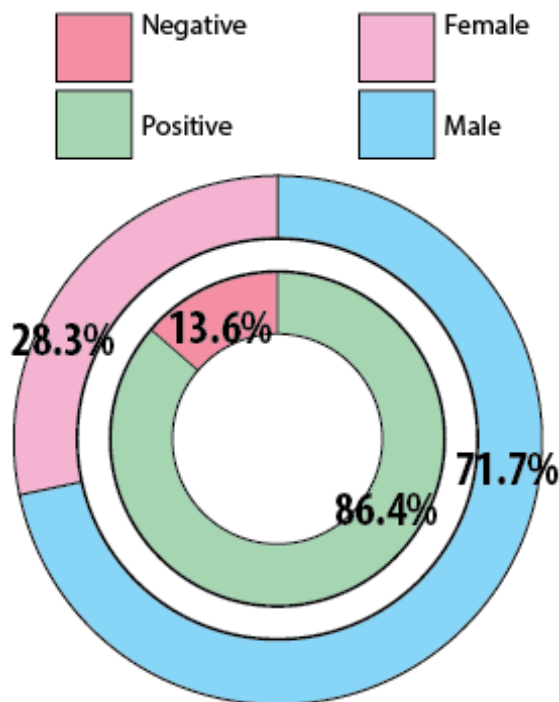
1. #Manufacturing
2. #Welding
3. #Welder
4. #MFG
5. #Weld
6. #Engineering
7. #Machining
8. #Ohio
9. #Fabrication



# TOPIC EXPANDED

## WELDER (ROLE)

Conversations among manufacturing workers regarding **Welding** often revolve around the satisfaction of holding a welding certification, with some expressing contentment over their career choice. However, discussions also feature varying opinions on the financial rewards of welding, with some debating whether it offers substantial earning potential.



 **Michael Sapp**  
@michaelsapp\_34

Official a certified welder. In 2018 I started at a community college thinking I would some day be a police officer. Then Looked more into my skills 3 years later I'm a welder. Couldn't be more happy right now. Don't shy away from trades they are just as good as any other job.

 **Leigh Brooklyn**  
@WLeighBrooklyn

Got my lifetime certification for 3G MIG welding!

[#womenwhoweld](#) [#womenwelders](#) [#welder](#)

 **Murdos**  
@DadMurdos

... That is the working class pay dude. The national average for welders entry-level pay is roughly 16.50/HR.

You didn't realize that? Shit oilfield work offers upwards of 27.00/hr and it's literally only 4 months of work for 55k+ in pay.

## TOPIC BREAKDOWN

Conversations that discuss **Welder** have an extremely high positive sentiment. This position is looked at highly due to the possible pay and benefits. **Many welders discuss becoming a contractor or specialist.**

## TAKEAWAYS

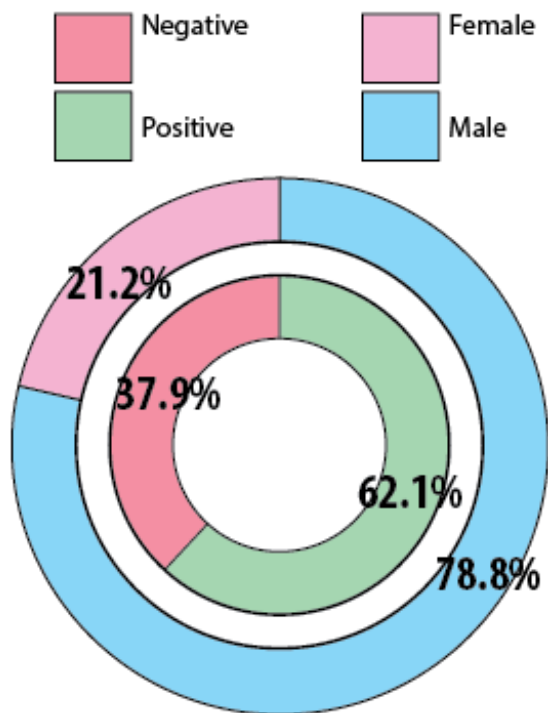
Welding significantly influences discussions surrounding the manufacturing workforce, as it serves as a focal point for conversations on skill development, job prospects, and industry trends.

# TOPIC EXPANDED

## YEARS

### (GENERAL)

Conversations among manufacturing workers about the term **Years** frequently involve discussions about their years of experience in factory work, reminiscing or complaining about their years in the field. Additionally, conversations about the age of factories often reflect concerns about potential closures, with older factories more likely to be mentioned in the context of shutdowns or operational challenges.



**Joshua Morrow**  
@divebarmegastar

I did 5 years of night shift work. That really is the hardest part. Spent a lot of time shootin pool at a dive bar at 8am with the other factory workers. And i got so sick of breakfast food since that was all that i could grab on my way home from work.



**Eric Grau**  
@EricGrau17

6 year old paper factory shut down where I am. Millions invested in the facilities.



**Rick Bell Jr.**  
@rickjr1956

All but my 3 years at the factory were service work. I did everything in my power to fix a problem or get the customer in touch with someone who could, especially at USPS. What I wasn't going to do was let some jerkoff threaten 17 year old me over \$5 of gas.

## TOPIC

### BREAKDOWN

Conversations had a higher negative sentiment from both conversations talking about how many **Years** they have worked in a factory, but also dreading how many **Years** they will need to be doing their manual labor.

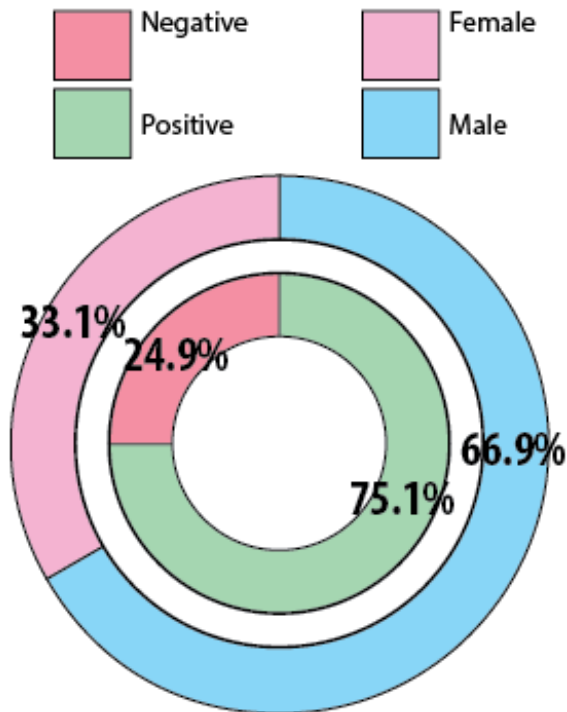
### TAKEAWAYS

These discussions emphasize the value of experience and seniority among workers, and introduce a dimension of industry challenges, shedding light on operational issues, potential closures, and the need for adaptation and modernization.

# TOPIC EXPANDED

## MACHINIST (ROLE)

Conversations among manufacturing workers about **Machinists** often involve concerns about the declining presence of skilled machinists in factories, highlighting the importance of this role in production processes. While some express satisfaction with their machinist roles, a significant portion voice dissatisfaction, underscoring challenges within this occupation.



**John @thebirdfarmer** · Jul 28, 2022  
Good question. I was told if I stayed in the trade when I was older I'd be able to set my price. At the same time telling me I needed to understand cam software better. There will always be a place for a good tool maker.

**Bob Morman @OhioFarmer99**  
And I think that is the problem. A skilled machinist is expensive. Companies will do almost anything to eliminate the need for one

**Silent P @ASAP\_Fisty**  
Left two years in. Money sucks and the job sucked. Became a machinist and now make almost double what I was making as an AT.

**MikeyPerk @mikeyperk**  
I didn't go to college. I just went to a tech school briefly for A+ Certs. I never thought I would be working as a machinist. Sorta wish I wasn't but it what it is.

## TOPIC BREAKDOWN

Interestingly, **Machinist** also had a relatively high positive sentiment compared to other topics. Positive conversations came from individuals who discussed **being paid well or feeling secure in their position**.

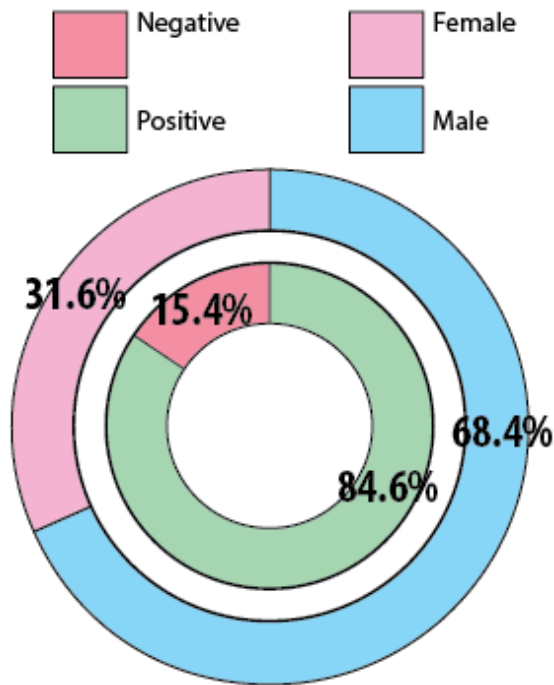
## TAKEAWAYS

The discussions highlight the evolving nature of manufacturing roles, emphasizing the critical need for skilled machinists in modern factories. These conversations also shed light on the broader challenges faced by manufacturing workers.

# TOPIC EXPANDED

## TECHNOLOGY (INDUSTRY)

Conversations among manufacturing workers regarding **Technology** reveal the dual impact of technological advancements on the industry. On one hand, there is enthusiasm about how technology has enhanced efficiency and even contributed to restoring manufacturing to the United States. On the other hand, some worried technology would suffer the same fate as the manufacturing industry.



**Syndi Martin** @SyndiMartin1  
1/2 Gas companies are getting filthy rich on us, used the ukraine war to increase prices & has reported record profits since then. And then there's the pollution. I'm not saying do away with all, but we have to cut down. Green technology has brought manufacturing back to

**Doug Kelly** @dougkelly  
Growing up in MI, I saw firsthand the painful effects of Congress handing over our manufacturing edge to China. They can't make the same mistake again with technology.

**Technology** provides many positive conversations discussing improvements and future improvements to the manufacturing industry. The new **technology provides a chance to expedite the process or make it safer.**

These discussions highlight the role of technology in revitalizing manufacturing, enhancing productivity, and potentially reshaping the manufacturing environment.

**Bobby Lee Chia Yih** @thegraciest\_  
this kind of technology is used in a lot of factory settings. it's a machine that you can program to detect certain colors, shapes, sizes, etc. we used it at a plastic manufacturer to detect misshapen or discolored parts. yes they were also sorted by hand afterwards

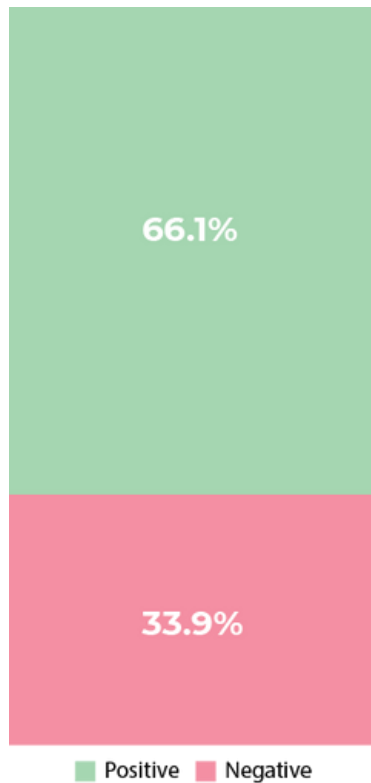
## TOPIC BREAKDOWN

## TAKEAWAYS



# SENTIMENT ANALYSIS

## SENTIMENT BREAKDOWN



When discussing factories or the manufacturing industry, conversations held a more **positive sentiment (66.1%)** than **negative sentiment (33.9%)**. This is a higher negative sentiment than typically seen in past social listening reports (15%-20%).

Analyzing the conversations with positive sentiment, there was a high percentage of those discussing being a **Welder (6.8%)**.

- There are many conversations from those who are happy they switched to welding.
- Others were supportive of being a welder over going to college.

The most commonly discussed topics in conversations with Negative sentiment include **Fired (5.5%)**, and **Injury (4.3%)**.



**Dave #VoteBlue**  
@dwh112655

This Company Got a \$10 Million PPP Loan, Then Closed Its Plant and Moved Manufacturing Jobs to Mexico

FreightCar America closed their Alabama plant just months after receiving a \$10 Million PPP Loan.



**Mutt Levi**  
@CottonCandyLevi

Started a new job today... absolutely hate it... very much not built for factory work...



**jvs**  
@ParallaxFlip

Everyone would like manufacturing to come home, it's just a matter of how to realistically make that happen when you are competing against the wages overseas workers make and whether tariffs are an effective way to do it (they usually are not).

# INSIGHT SUMMARY

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## ESTABLISH A CLEAR CAREER PROGRESSION PATHWAY

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Conversations regarding Career and Growth were prevalent in the data collected. In these conversations, workers may express frustration about the **absence of clear career paths or limited opportunities for growth** within the organization. Some workers even mention a desire for more responsibility or authority. Developing a comprehensive job-leveling framework that outlines various roles, responsibilities, and skill requirements could show support to employees seeking career growth.

## ADDRESSING UNEMPLOYMENT CONCERNS

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There was a higher number of conversations about Unemployment among the 35-44-year-old age group indicating potential workforce retention challenges. Improving the overall job satisfaction of employees can create a **more supportive and attractive environment** ultimately reducing unemployment concerns and enhancing overall retention.

## LACK OF CAREER GROWTH OPPORTUNITIES

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Workers in the manufacturing industry would argue that they lack opportunities for career advancement. Some would state that **they would make employees feel undervalued and unappreciated for their contributions**. Implementing employee recognition programs by recognizing achievements and milestones can boost morale and also reinforce a positive work culture.

# INSIGHT SUMMARY

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## ADDRESSING SAFETY CONCERNS

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Unsafe working conditions or inadequate safety protocols can lead to employees leaving for safer work environments. **Creating a safe working environment** is crucial to attract and retain workers in the manufacturing industry. Manufacturers should invest in safety training, ergonomic assessments, and safety audits to ensure employees feel secure.

## ADDRESS CONCERNS REGARDING AUTOMATION

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Online conversations shared concerns regarding automation technologies being integrated into the manufacturing process. **These workers feel anxious about potential job displacement** that may be caused by new automation practices. Being clear in communication about how automation enhances productivity rather than replacing jobs can help alleviate concerns.

## ADDRESS NEGATIVE SENTIMENT AMONG U.S. HISPANICS

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The data indicates that U.S. Hispanics have a higher negative sentiment (41.9%) compared to the general audience (33.9%) when discussing factories or the manufacturing industry. This higher negative sentiment may be indicative of dissatisfaction in the workplace. Topics that contributed to this negative sentiment include **injury, quitting, taxes, and the automotive industry.**

# CONCLUSION



In conclusion, **the manufacturing sector has gone through significant changes due to the global pandemic**, revealing complex challenges with far-reaching effects. A major concern in the midst of these challenges has been finding and keeping skilled workers. This has been a focus for the Ohio Manufacturers' Association and its partners. The balance between **recruiting and retaining** a skilled workforce, especially during the training phase, has led to a thorough exploration of strategies and solutions.

Through harnessing the advanced capabilities of **O.Y.E. Intelligence Software**, Nativa has conducted an exhaustive examination of social media discussions and online conversations. The insights extracted from these interactions have provided invaluable glimpses into public perceptions, sentiments, and emerging trends linked to the manufacturing workforce. **This research has helped us understand why people leave these jobs, guiding strategies to reenergize the industry and promote ongoing growth.**

The research aimed to answer why individuals leave their employers or the manufacturing field altogether. Nativa's key findings encompass the following: With a younger workforce navigating a demanding economy and persevering through adversities to achieve success, **aligning their technological skills with industry requirements is paramount.** Additionally, an intricate blend of elements—comprising shifts in the economy, historical trends, and global events viewed through the lens of evolving values—exerts a profound influence on the decisions made by the workforce.

To navigate these complexities and retain a vibrant workforce, manufacturing entities are urged to prioritize **prompt decision-making, transparent communication, comprehensive well-being support**, and a **clear path for career progression.** In this era of interconnectedness and value-driven choices, an organization's social presence and alignment with employee perspectives will determine its success in attracting and retaining talent. Ultimately, **a strategic embrace of technology, bolstered by a commitment to holistic employee growth and safety**, is pivotal for the manufacturing sector's revitalization and sustained success.

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