



The Current State of the American Manufacturing Industry

It would be impossible to write the story of how the United States became one of the most successful countries in the history of the world without a heavy focus on the impact of manufacturing. At our country's humble beginnings, the U.S. was a largely agrarian nation with virtually every product available being a handmade, one-of-a-kind good. But necessity spurred innovation, driving these early Americans to conceive basic machinery and techniques that replaced simple manual processes and multiplied their output.

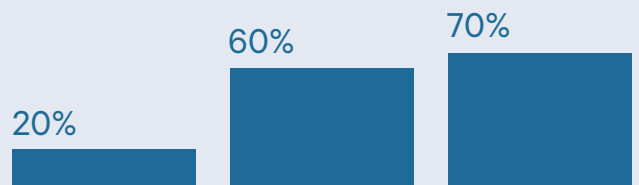
Eventually, what began as a disparate country of farmers would prove its place on the world stage by rising to meet the threats posed by the second world war. And it would accomplish this massive feat by having the ability to manufacture materials, supplies, equipment and vehicles with higher speed and volume than its foes.

Simply put, the U.S. owes a great deal to manufacturing. But times have changed since this industry made us a superpower. The rise of robotics and smart manufacturing automated many of the jobs on the shop floor, while also creating a demand for different types of work in the office. And like all other areas of our economy, the COVID-19 pandemic has had a deep and lasting impact on the manufacturing industry.

As the U.S. economy struggles to return to its pre-pandemic levels, the manufacturing industry is once again posed to play a major role in the recovery. The COVID-19 pandemic clearly demonstrated the importance of providing the products critical to health, safety, national security and the continuity of multiple other industries. Manufacturing also continues to be responsible for large contributions to the American economy, as much as 20 percent of net capital stock, 60 percent of exports and 70 percent of R&D spending. And all of this with only eight percent of the U.S. workforce employed by the

manufacturing industry. Growth in the manufacturing sector should be a goal to all parties interested in the welfare of the U.S. and its future well-being.

In this article, we'll take a deeper look at the current state of the manufacturing industry in the U.S. Specifically, what are the current strengths, weaknesses, threats and opportunities facing American manufacturing? And what can manufacturers do to ensure they are best aligned for success in the years to come?



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Strengths of American Manufacturing

Possibly the most powerful strength of the U.S. manufacturing industry is its reputation for quality. Goods produced in American facilities are still very much in high demand. And for good reason. U.S. manufacturing facilities are held to high standards of quality by regulatory bodies including the Food and Drug Administration (FDA), the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA) and the Securities and



Exchange Commission (SEC), among others. U.S. manufacturers are also held to higher labor standards than some of their counterparts around the world. These standards are strictly enforced by state and federal laws to ensure compliance, meaning that buyers purchasing an American product can rest assured they are not contributing to child labor, slavery, trafficking or dangerous working conditions.

Another strength of U.S. manufacturing is its alignment with the standards of conscientious capitalism, an increasingly popular business philosophy which states that all businesses should operate ethically while they pursue profits. This means serving all stakeholders including employees, humanity as a whole, and the world's environment, not just management and shareholders. Buying from American manufacturers provides security to the national supply chain by reducing dependence for materials from overseas. It promotes American jobs and keeps our money within our economy. It also helps reduce the many detrimental impacts of overseas shipping including air pollution, the spread of aquatic invasive species, oil and chemical spills, garbage and many more.

Finally, evolving technology platforms and fulfillment services have given U.S. manufacturers an advantage. These advancements let manufacturers sell directly to the customer, cutting out retailers and group buying organizations, and pushing profits straight back to the manufacturer.

Weaknesses of U.S. Manufacturing

Manufacturers worldwide are under incredible pressure to turn profits for investors. Over the past two decades, average profits for \$1 of capital investment in manufacturing have fallen 80 percent. In such a climate, even small differences in compliance or input costs, or currency valuations, can be the difference between success and failure. And lately, most of these trends have not favored U.S. manufacturers.

Attempts to keep up with investors' expectations have led many U.S. manufacturers to cut costs through suppressing wage growth and focusing on more profitable activities such as R&D and design, while offshoring less profitable (but nonetheless important) elements of the manufacturing value chain such as production. These changes have affected industry employment trends, as well as exposed the risks to supply chain disruptions from an increased dependence on foreign imports.

Threats to U.S. Manufacturing

With a vast migration to more digital-based process innovations comes risks from cyberattacks. Since the beginning of the pandemic, cybercriminals have targeted the American manufacturing sector in increasing numbers to not only steal intellectual property and ransom back stolen data, but also shut down operations and disrupt supplier networks.

U.S. manufacturers are well aware of this threat, with 82 percent of executives expecting their organizations will invest more in cybersecurity in 2022 than they did the previous year. But even with the latest security measures in place, a recent report found that 84 percent of U.S. manufacturers reported phishing or ransomware security incidents in 2021.



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Another threat to U.S. manufacturing is the growing talent scarcity. The need for scientists, product designers and software developers for R&D and design-based activities remains strong. But growing other areas of the value chain to reduce America's dependence on foreign imports also



calls for specialized engineers, production technicians and industrial operations managers. Production-based activities are becoming more automated and require highly skilled personnel to operate efficiently.

According to a report released in December 2021 by the U.S. Bureau of Labor Statistics, manufacturing jobs are still down by 219,000 from pre-pandemic levels. And while durable goods added 20,000 jobs in December, job numbers in nondurable goods have remained stagnant. Another report by Deloitte found that as many as 2.1 million manufacturing jobs will be unfilled through 2030, subsequently warning that the talent shortage would hurt revenue and production, costing the U.S. economy up to \$1 trillion by 2030.

Opportunities of U.S. Manufacturing

The difference in labor costs between countries that has long plagued U.S. manufacturing is beginning to equalize. America now matches Japan and Germany in productivity-adjusted costs, and China's wages are beginning to catch up. There is a real opportunity to increase domestic sourcing of local goods and reduce dependence on foreign imports.

Another major opportunity for American manufacturers stems from one of its biggest threats. While the talent shortage has impacted manufacturing in big ways, it is not the only industry to suffer. In November 2021, a record 4.5 million Americans voluntarily left their jobs across the board, totaling over 10.5 million vacancies in the U.S. There is an enormous amount of available talent looking for new opportunities, and it is up to manufacturers to make their industry stand out as an attractive employment opportunity for these potential candidates.

Aligning for Future Success

To take advantage of this opportunity, manufacturers should proactively engage with local communities to increase awareness of their industry as a viable career opportunity. Manufacturers should broaden their talent pipeline, drawing a more diverse group of candidates. Former military personnel are an often-

untapped resource for management and highly skilled positions. Recruitment efforts directed at the high-school level can educate future candidates about the competitive pay and career-building opportunities available in manufacturing.

But manufacturers should also consider some internal changes to make their workplace as attractive as possible. An assessment of company culture can help identify areas of improvement to promote diversity, equity and inclusion initiatives. Replacing shift-based work with more flexible scheduling arrangements offers candidates a better work/life balance. Internal training programs utilize existing staff by building their skills for promotion while demonstrating advancement opportunities to new recruits.

Besides competitive compensation, manufacturers should also take care of their employees' health and safety on the job with supplemental well-being programs that improve productivity, reduce fatigue, prevent injuries or provide immediate care in the event of an accident.

The Industrial Athlete program from Harness Health Partners is a prime example of such a resource. The program places a certified athletic trainer onsite to work closely with employees to teach proactive ways to avoid injuries and promote good health. The Industrial Athlete program demonstrates an employer's commitment to work safety and health, and is an excellent tool for retaining current employees and attracting new candidates.

Conclusion

The U.S. owes a debt of gratitude to American manufacturing for making it the superpower it is today. And while advancements in technology, foreign competition and outsourcing of labor have altered the manufacturing industry in the U.S., it remains closely connected to the health of our economy. In addition, the COVID-19 pandemic demonstrated the importance of reducing U.S. dependence on foreign production.

Especially now, in the midst of an unprecedented talent shortage, manufacturers have the opportunity to reinvigorate their sector by making manufacturing jobs an attractive career option for candidates. Doing so is not only important for maintaining profitability, but essential for the continued success of our country.