

Executive Summary

Research Question

What employee value proposition strategies can US manufacturing firms develop to attract, retain, and engage salaried engineers from millennial and Gen Z talent pools?

Introduction

Key talent challenges in the manufacturing industry center on increasingly more job vacancies than hires (85% more vacancies than hires as of September 2021), increasing job turnover rates (40% in 2021), and a retiring workforce (25% of workforce as of December 2021 is 55 or older).^[1,2] Additionally, there is a declining interest in working in manufacturing among millennials and Gen Z talent.^[3] At this rate, it is anticipated that US manufacturing will have 2.1 million unfilled jobs by 2030 unless the industry develops a value proposition for employees like it does for its customers.^[3,4]

Understanding the Talent: Millennials and Gen Z

Millennials and Gen Z are a significant part of the global workforce and will have a substantial impact on restructuring the workplace. Though the two generations are very different from each other, there are similarities in their expectations of work. In addition to compensation, this demographic is also asking for more flexibility, increased learning and development opportunities, and more significant commitment from businesses toward social impact.^[5,6] Furthermore, they are far more open to changing jobs to fulfill their career aspirations. Thus, the value proposition to attract and retain this talent is guided by flexibility, growth, and culture.^[6]

The Value of Intrinsic Motivation at Work

Intrinsic motivation is a powerful driver of employee engagement and should be used intentionally with extrinsic motivators. Intrinsic rewards provide a sense of meaningfulness, choice, competence, or progress to the recipient. All four could be leveraged as motivators in manufacturing, but choice and progress fit well with emerging post-pandemic trends.^[9] One salient application of choice is enabling employees to have individual or group influence over decisions in the workplace. Involving employees in decisions such as training measures, work schedules, or health and safety standards can significantly boost motivation and productivity.^[10] Ultimately, intrinsic motivation should intentionally underpin employee value proposition strategies and remain top-of-mind when considering rewards and motivators.

Emerging “Future of Work” Practices Which Support Intrinsic Motivation

While manufacturing is often viewed as an inflexible industry, many firms are moving towards a workplace flexibility (Workflex) model, where there is a dynamic partnership between employers and employees that defines how, when, and where work gets done in ways that work for all (employers, employees, families, clients, & communities)^[11] Appendices 3, 4, and 5 provide some exciting insights into employee preferences and the new role of flexibility in manufacturing. Below are some example policies from a Workflex model in practice. One element of success for these examples is that they can support intrinsic motivation when implemented deliberately.

Flexible work hours: Allow employees to identify core hours where employee presence is necessary and secondary hours where more flexibility is possible. Then allow flexibility around the edges.^[11]

Compressed workweek: If possible, consider allowing teams to manage their schedules in a way that allows for more days off.^[11]

Shift swapping: Voluntary exchanging of shifts or workdays, and are best when the employee is responsible for arranging the swap.^[11]

Alternative shift and break arrangements: Talk with employees about developing alternative schedules that meet personal and family demands without interfering with productivity.^[11]

Input into break arrangements: Enabling employees to swap breaks or input into when to schedule breaks.^[11]

Split shifts: Dividing a shift into two or more sections with a pause between each section.^[11]

Other Approaches: Attracting, Engaging, and Retaining Talent

Rethinking work flexibility in manufacturing could prove effective in engaging and retaining the millennial and Gen Z talent. However, there are other approaches that manufacturers could use as well.

Attracting Talent via social media: Manufacturers have lagged in using technology to reach potential candidates. Proactive and inventive engagement approaches, such as online forums, to discuss business and career issues and invite select participants to join. This would not only help identify prospects but also help the company develop as an employer brand.^[4,7]

Case Study: Marriott posts engaging content twice a day on its online career page, offers dedicated entry points for veterans, students, and grads, and encourages its employees to chat with job candidates on its career page, and provides advice on applying for a position.^[1]

Redefining talent & creating partnerships: Manufacturing organizations are expanding their talent pools and increasing flexibility in their hiring processes by prioritizing competencies and potential instead of years of experience.^[7] They can also consider partnering with community colleges and local organizations focused on training and job placement.^[1]

Case Study: ABB, based in Switzerland, has instituted a program for engineering students that provides global scholarships to students^[4]. Pacific Gas and Electric (PG&E) offers a free, eight-week PowerPathway training program in partnership with several California colleges, the Aspen Institute, and veteran organizations.^[1]

Developing a broad talent approach: To attract and retain millennial and Gen Z talent, companies must create a challenging environment that provides growth opportunities.^[4] Questions to consider for a talent management approach are provided in Appendix 1. Also, manufacturing companies can leverage workforce data to identify talent gaps to develop effective training and career programs.^[4]

Case Study: An independent oil and natural gas exploration company in Canada commissioned a detailed workforce analysis to develop 10-year skill supply projections, predict production trends, identify industries and communities that could provide sources of labor, and engage with academic programs for engineering talent.^[8]

Conclusion

The ongoing challenges that most manufacturers face to attract, engage, and retain their workforce will likely persist without an industry-wide effort. While there are constraints to adopting remote working in the industry, there are strategies that can be employed to offer greater flexibility. Understanding the millennial and Gen Z expectations of the workplace and re-shaping their talent strategies and Flexwork models will help manufacturers manage the talent shortage.

References

- 1- “Manufacturers Have Plenty of Jobs, but Few Takers.” *Bain*, 15 Dec. 2021, <https://www.bain.com/insights/manufacturers-have-plenty-of-jobs-but-few-takers/>
- 2- *Table 16. Annual Total Separations Rates by Industry and Region, Not Seasonally Adjusted - 2022 M01 Results.* <https://www.bls.gov/news.release/jolts.t16.htm>
- 3- “Creating Pathways for Tomorrow’s Workforce Today.” *Deloitte Insights*, <https://www2.deloitte.com/us/en/insights/industry/manufacturing/manufacturing-industry-diversity.html>
- 4- “Talent Management in Manufacturing: The need for a Fresh Approach.” PricewaterhouseCoopers, <https://www.pwc.com/gx/en/industrial-manufacturing/publications/assets/pwc-talent-management.pdf>
- 5- *The Deloitte Global 2022 Gen Z and Millennial Survey | Deloitte Global.* <https://www.deloitte.com/global/en/about/people/social-responsibility/genzmillennialsurvey.html>.
- 6- “Millennials at Work: Reshaping the workplace.” PricewaterhouseCoopers, <https://www.pwc.com/co/es/publicaciones/assets/millennials-at-work.pdf>
- 7- “2018 Deloitte Skills Gap and Future of Work in Manufacturing Study.” *Deloitte Insights*, <https://www2.deloitte.com/us/en/pages/manufacturing/articles/future-of-manufacturing-skills-gap-study.html>
- 8- “Oil and Gas Talent Management.” *Deloitte Georgia*, <https://www2.deloitte.com/ge/en/pages/energy-and-resources/articles/oil-and-gas-talent-management.html>
- 9- Thomas, K. W. (2009). *Intrinsic motivation at work: what really drives employee engagement.* (2nd ed.). San Francisco: Berrett-Koehler Publishers. Retrieved from <https://resolver.ebscohost.com/Redirect/PRL?EPPackageLocationID=2755116.674055.35221612&epcustomerid=s9001366>
- 10- Frey, B. S., & Osterloh, M. (2002). *Successful management by motivation: balancing intrinsic and extrinsic incentives.* Berlin: Springer. Retrieved from <https://resolver.ebscohost.com/Redirect/PRL?EPPackageLocationID=7191.1922221.6322173&epcustomerid=s9001366>
- 11- “Workflex and Manufacturing Guide: More Than a Dream” *Kenneth Matos and Eve Tahmincioglu*, <https://www.shrm.org/about-shrm/news-about-shrm/Documents/manufacturing-guide.pdf>
- 12- “The Future of Flexible Work in Manufacturing.” *Manufacturers Alliance Foundation in Partnership with Aon*, https://www.manufacturersalliance.org/sites/default/files/2021-06/Aon-Report-F3_0.pdf

Additional Reading

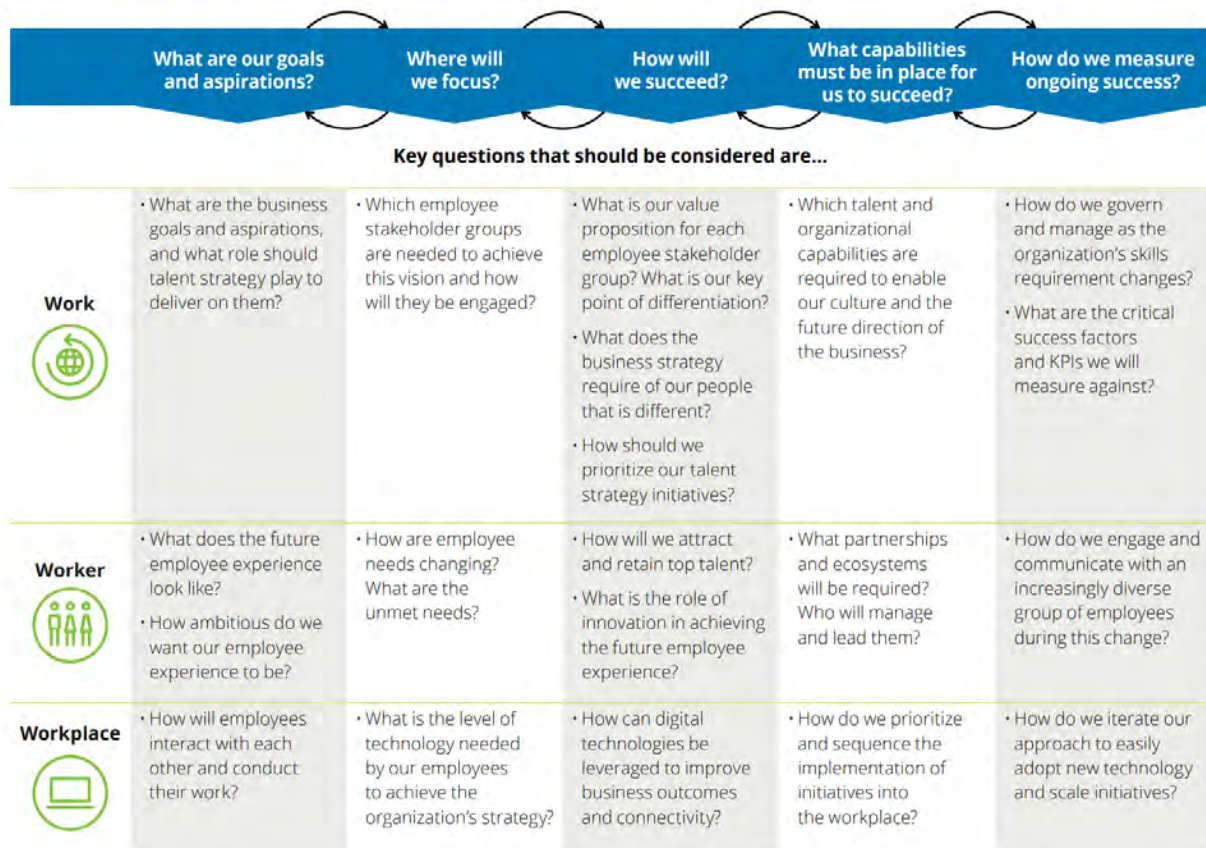
“The Future of Flexible Work in Manufacturing.” *Manufacturers Alliance Foundation in Partnership with Aon*, https://www.manufacturersalliance.org/sites/default/files/2021-06/Aon-Report-F3_0.pdf

“Workflex and Manufacturing Guide: More Than a Dream.” *Kenneth Matos and Eve Tahmincioglu*, <https://www.shrm.org/about-shrm/news-about-shrm/Documents/manufacturing-guide.pdf>

“The Future of work in Manufacturing.” *Deloitte Insights*, https://www2.deloitte.com/content/dam/insights/us/articles/4747_Manufacturing-personas/4747_Manufacturing-personas-Interactive.pdf

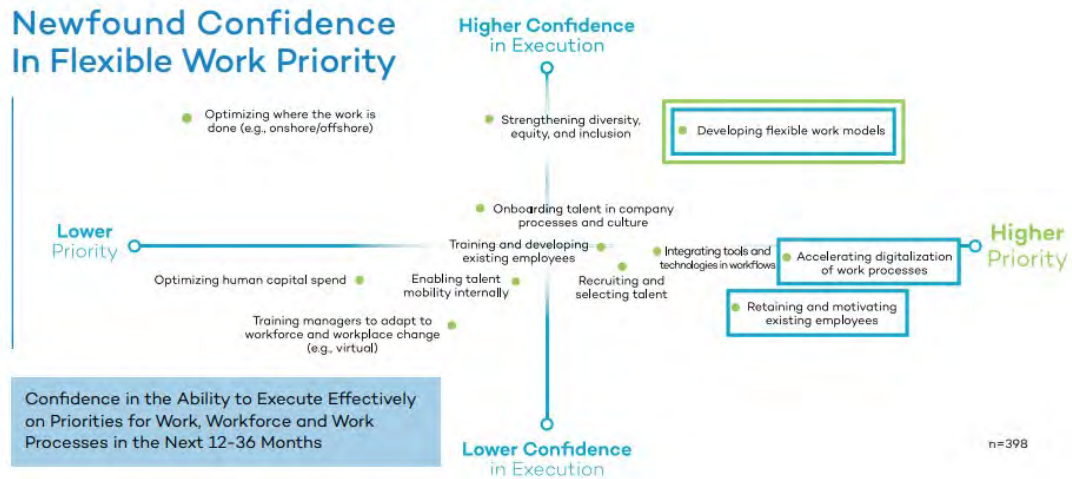
Appendices

Appendix 1- Developing a broad talent approach



Source: “Oil and Gas Talent Management.” *Deloitte Georgia*.

Appendix 2- Newfound Confidence in Flexible Work Priority



Developing flexible work models ranks high as both a priority and an area where executives report more confidence in execution.

As one of several priorities elevated during the pandemic, high confidence levels observed in flexible work are similar to diversity, equity, and inclusion (DEI) and optimizing work location (e.g., onshoring). While prioritized differently, all are gaining more attention within manufacturing today.

For both DEI and flexible work, high levels of confidence may reflect the perception of business

necessity as well as organizational commitment.

Other top areas – digitalization, integration of tools and technologies, and talent retention and acquisition – remain higher priorities overall but reflect lower relative confidence levels in execution, possibly as long-time challenges.

Manufacturers should work closely with taskforces and experts to

prioritize areas for improving work, workforce, and work processes – with confidence.

Training managers to adapt to change ranks as the priority with the least confidence in execution. Function leaders are also less confident in onboarding than human resources. If left unaddressed, these could be the Achilles' heel to the successful development and implementation of advances in the future of work.

Source: “The Future of Flexible Work in Manufacturing.” *Manufacturers Alliance Foundation in Partnership with Aon*

Appendix 3- Hybrid Future of Work Centers On Flexibility

Executives expect a seismic shift toward flexible work for the salaried workforce, with arrangements incorporating both onsite and virtual work.

A hybrid model – in place for a majority of employees within only 12% of departments pre-COVID – is expected to surge to 80% of departments, a 7X increase! Flexible work is one of the most immediate decisions that leaders will make in charting the course for the future of work.

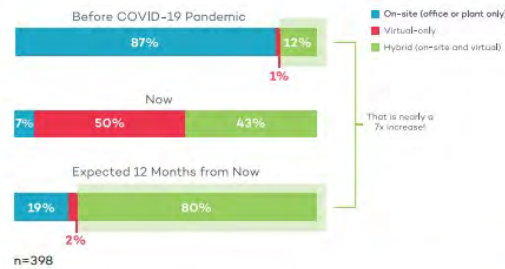
In April 2020, over half of executives surveyed reported most employees working virtually without coming into the office. This virtual-only group scarcely existed before the COVID-19 pandemic and is expected to decline in the post-pandemic period.

As virtual-only options are expected to fall off with return to work, non-essential business travel is another area that will continue to evolve given potential for more lasting change in criteria for on-site visits with employees as well as customers across geographies.

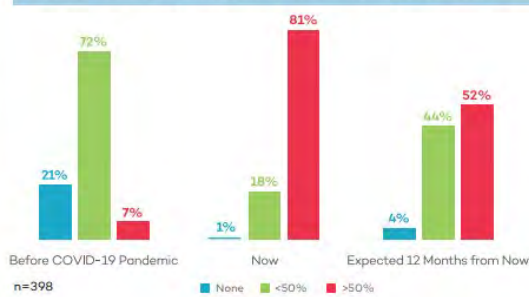
Among those with a remote work option, indicators are that two or three days of remote work is the median for salaried workers. Factory workers are most likely to continue traditional work models but with increasingly flexible options available to attract and retain talent.

Hybrid Future of Work Centers On Flexibility

Work Arrangements for Employees Able to Work Virtually



Employees Able to Work Virtually at Least One Day Per Week



The Future of Flexible Work in Manufacturing | Manufacturers Alliance

14

Source: “The Future of Flexible Work in Manufacturing.” *Manufacturers Alliance Foundation in Partnership with Aon*

Appendix 4- Employee Preference is Increasingly Important

Manufacturers are deferring to employee preference over policy more than ever before.

Companies able to accommodate employee preference for flexible work models may have a competitive advantage in the future. Some employees are willing to forego higher compensation for flexible work.

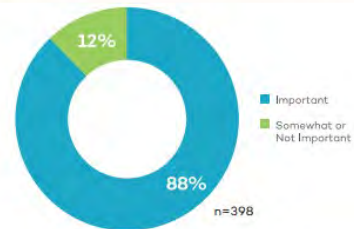
Executives across functional areas are placing importance on developing flexible work models. We see only modest variation in the degree of importance expressed from human resources versus leaders in the commercial organization or engineering.

Flexible work arrangements formerly determined through company policy are 4X more likely to reflect employee preference today. This is a shift in favor of flexibility and choice.

That said, the shift is not as dramatic as that across other industries. Aon's Global HR Pulse Survey in May 2021 finds 75% of companies across industries are considering employee preference in determining flexible work arrangements.

Employee Preference is Increasingly Important

Importance of Developing Flexible Work Models in the Next 12-36 Months



Primary Driver of Employee Work Arrangement



The Future of Flexible Work in Manufacturing | Manufacturers Alliance

16

Source: "The Future of Flexible Work in Manufacturing." *Manufacturers Alliance Foundation in Partnership with Aon*

Appendix 5- Factory Workers Seeking Flexible Work

As manufacturers see record levels of job openings in mid-2021, they face greater urgency to manage a long-term workforce challenge: factory workers who have more flexible alternatives in an improving economy.

Manufacturing outpaces all other sectors in job openings, according to the Bureau of Labor Statistics data from February 2020 through April 2021.

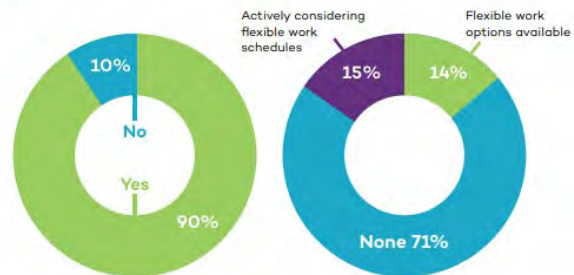
Contributing factors for shortages and historic openings include the economic rebound, pandemic retirements, enhanced unemployment benefits, and longstanding industry challenges in hiring a diverse talent pool, including women.

Although factory work is inherently more limiting for hybrid options, an increasing share of companies that offer alternative, flexible models will acquire and retain the in-demand talent. Survey data from Aon reveals that more of these options are under consideration currently.

Factory Workers Seeking Flexible Work

Factory Locations Reporting Challenges in Attracting Hourly Workers

Availability of Flexible Work Options at Factory Locations



Adding flexibility at the plant:

- ✓ Flexible working hours
- ✓ Compressed workweeks
- ✓ Split shifts
- ✓ Shift swapping
- ✓ Part-time positions

"The manufacturing world is going to have to adjust in order to attract and retain really talented people at all levels in the company, especially on the plant floor."

- SVP, Human Resources

Source: Aon Pulse Survey "Attract and Retain Hourly Workers," June 2021.

Source: "The Future of Flexible Work in Manufacturing." *Manufacturers Alliance Foundation in Partnership with Aon*