



Quality Jobs Are a Choice

Why We Need to Think About Job Design

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The US self-identifies as the land of opportunity. People want and expect to work for that opportunity and for most people, that will mean getting a job. In 2020, [84% of adults](#) between the ages of 25 and 54 participated in the labor market. Wage and salary earnings constitute the primary source of income for the overwhelming majority of US households. But work, of course, is about more than income. In our view, a quality job should provide three things at a minimum: economic sustainability, opportunity, and dignity. That is, to be considered a quality job, a job should provide a level of compensation – package of wages and benefits – that allows a person to maintain a dignified standard of living in their community. Quality jobs also provide the opportunity, although not a guarantee, that one can develop skills, build wealth, and advance economically. And critically, quality jobs are ones in which a person is treated with dignity and respect for the work that they do. The workplace fosters equity and workers are not treated differently due to their race, gender, ethnicity, religion or other difference and people have agency to raise concerns about their workplace and contribute to making their jobs better.

While all these job features are important, we have the best data on earnings. And on this front, the news has generally not been very good over the past several decades – with earnings flatlining or declining – even as the economy continued to grow. Indeed, prior to the pandemic, 1 in 5 workers were eligible for the Earned Income Tax Credit,



which means their jobs yielded an earnings level insufficient to meet the basic needs of their household.¹ More recently, Oxfam America estimated that almost one-third of the workforce, or 52 million workers – a disproportionate number of whom are women and people of color – make less than \$15 an hour.² These jobs are not just low paying, but are also frequently associated with other job quality issues such as unpredictable schedules and a lack of paid time off.³ Many of these jobs are characterized by mundane and uninteresting work with little opportunity for learning or advancement. Workers' skills or abilities are often unjustly blamed for low-quality jobs, especially when the jobs are held by women and workers of color. But low quality jobs are not caused by workers, and they are not an accident.

Low-quality jobs reflect the choices businesses and employers, the government, and we as a society have made about how we design work. Different choices can be made. Research shows that when we do choose differently, good job design can create a number of positive outcomes for workers such as better health,⁴ and for businesses, including low employee turnover and higher worker productivity.⁵ However, those decisions do not fall on employers and businesses alone. Government not only sets the basic rules for work that provides a floor for job design, it also directly employs millions of people and indirectly affects the job design of millions of more through contracting and purchasing. Through their investments, philanthropic institutions also have a role to play. And labor unions, workforce development, and economic development organizations that partner with employers certainly have an ability to influence job design. Technological change, work-based learning, and strategies that promote employee ownership offer new opportunities for all of these stakeholders to rethink job design, even as we struggle to put behind us archaic approaches that see workers as little more than cogs in the machine.

A Brief History of Job Design

The field of job design traces back to the 18th century and the Industrial Revolution, when the development of factories and other larger worksites created a need to better organize work. Job design was traditionally considered as the collection of tasks that made up a person's work, without much thought given to how the work affected workers' well-being. Initial theories, such as Adam Smith's division of labor concept, proposed that work be broken down into small and simple tasks to improve worker efficiency and productivity. Over time, others expanded upon this theory, positing that job simplification would create jobs that required less skills and, therefore, less pay. Frederick Taylor built on the job simplification theory to include elements that exerted greater control over how employees did the work and how fast they did it. In some respects, these ideas culminated in the advent of the assembly line.⁶ Though the assembly line achieved what it promised in terms of efficiency, American workers entered an era of discontent and worker strikes swept the nation. Research showed



workers were not only dissatisfied with this approach to job simplification, but their mental health was also suffering.⁷

In response to the discontent with the Taylorist system, the human relations movement emerged and began to consider how job design affected workers' satisfaction and well-being. Beginning in the 1920s, job design researchers found that simply listening to workers' opinions about their jobs and working conditions increased worker productivity, and that, unsurprisingly, workers' attitudes about their jobs affected their behavior. Research continued to expand on how job design affected worker motivations and psychological needs through the 1960s when more attention was placed on how supervision and worker autonomy affected job satisfaction. A growing awareness continued to emerge that jobs could be designed in ways that increased motivation and satisfaction. This awareness helped set the stage for the development of the Job Characteristics Theory in the 1970s. The model, which is still embraced and used today, proposes that worker autonomy, feedback, the significance of one's work, the ability to use a variety of skills and talents, and the ability to be involved in completing a visible work product from start to finish (rather than just one part of it), increases worker motivation, satisfaction, and performance.⁸

Even as the research in job design evolved in the mid-1900s, many firms held onto the premises of Taylorism, designing jobs with little consideration of its impacts on workers or their well-being or job satisfaction. Other firms, however, began to look at structuring work in a different way, based on a view that a company could engage its workers and develop their abilities to help drive business performance. In the 1970s and 1980s, Toyota and other firms in Japan drew attention for the job design and continuous improvement practices that had helped these firms begin to outperform their US counterparts. The practices, sometimes referred to as the "Toyota model," organized frontline workers into teams, involved them in decision making and job design, and made their skills development a priority.⁹

US companies continued to lose ground in the 1970s and 1980s due to increased global competition and their own internal struggles with low productivity, worker turnover, and recruitment. These pressures brought forth a growing recognition of the "Toyota model" and that workers and the structure and organization of their jobs could be integral to a company's competitive advantage. Job design practices from Japan began to take root in the US, helping give birth to the High Performance Work Organization (HPWO).¹⁰ Similar to the practices used by Toyota, HPWO firms place an emphasis on engaging frontline workers in decisions, providing them autonomy to do their jobs effectively, ensuring effective workplace communication and information sharing, and developing workers' skills. Job security and financial incentives such as profit sharing for workers are also often key elements of HPWO.¹¹

Research into HPWO has been associated with a number of positive benefits for workers and firms¹² and continues to be a part of an ever-growing body of research into



job design that looks at how a range of factors from pay to workplace culture can create quality, dignified work for employees while also helping drive positive business outcomes. Research on effective job design has substantially advanced understanding of how these practices can drive positive business performance as well as improve worker understanding, but widespread adoption of strategies such as HPWO and other promising job design strategies that help promote job quality and advance business performance nonetheless remains slow.

Job Design and Worker Experiences Today

High road employers that design high-quality jobs remain exceptions rather than the rule today, leaving too many workers without decent work. Some jobs, such as poultry processing where workers stand in an assembly line processing up to 140 birds per minute, or 14,000 per day, remain premised on the division of labor and Taylor's scientific management concepts from more than 100 years ago,¹³ ignoring the human costs such methods can have when not mitigated through other design factors. Research shows poultry workers, who are more likely to be immigrants and people of color,¹⁴ suffer injuries such as amputations and experience depression at much higher rates than other workers.¹⁵ These are the same type of negative worker outcomes that researchers found in the early 20th century.

Our job design choices are influenced by a number of factors. Shareholder capitalism and the relentless pursuit of maximizing profits is certainly a factor. The choices we make in public policy on issues such as the minimum wage, health care, sick leave, worker safety, discrimination, and even who is classified as an employee also affect how businesses and employers design jobs. And research also shows that different cultures approach work design differently. For example, employers in Anglo-Saxon countries with more deregulated labor markets that make it easier to hire and fire people tend to employ higher numbers of managers and use more management and control practices in response to work environments that foster less trust, loyalty, and commitment. These practices come at the cost of innovation, productivity, and organizational learning.¹⁶

The design of low-quality jobs is also fueled by systemic racism and sexism. These jobs reflect societal choices that devalue the work of women and people of color, in particular. The more women or people of color in an occupation, the less it pays.¹⁷ White men hold a majority of the jobs for each of the top 10 paying occupations while the 10 lowest-paying jobs are held predominantly by women and people of color.¹⁸ Even as women overcome discrimination and enter higher-paying jobs, pay for those jobs decreases too. A large longitudinal study shows that as a large number of women move into an occupation over time, the pay for that work decreases.¹⁹ For example, as women began to hold more positions as biologists, pay for the occupation fell nearly 20%.²⁰



Only 44% of workers in the US believed that they had a good job in 2020. Workers with lower incomes were less likely to report having a good job. Workers rated stable and predictable pay, job security, purpose and dignity in their work, enjoying their day-to-day work, and the health and safety of the work as the top five most important characteristics of their job.²¹ Workers' satisfaction with their job is a strong predictor of how they perceive their quality of life too – even more than income. Other research from Gallup showed that almost 80% of workers who said they had a good job rated their quality of life as high compared to only 32% of those who reported being in a bad job.²²

As in the late 1800s and early 1900s, a new era of worker discontent is leading to an increase in worker strikes and organizing. Workers are also leaving the jobs they are dissatisfied with and finding better jobs elsewhere in what has been dubbed The Great Reshuffle. Industries such as retail, fast food, and hospitality – where job quality is notoriously low – have some of the highest attrition rates. We are just beginning to understand exactly what is driving workers to quit, but researchers at MIT found issues such as failure to advance diversity, equity, and inclusion; job insecurity; a lack of respect for workers and inadequate recognition; and poor employer responses to COVID-19 were predictors of employee turnover.²³ Additional research has shown that some workers commonly changed employment because of unpredictable work schedules, because they found opportunities to upskill for new careers and jobs, or they decided to prioritize their own health and well-being.²⁴ Regardless of reason, many workers are clearly beginning to demand jobs that are designed with their interests and needs in mind.

Good Job Design Benefits Businesses and Workers

Over the last few decades, staff at the Aspen Institute's Economic Opportunities Program (EOP) have done a lot of thinking and exploration on what a good job is, particularly in the wake of the Great Recession, as the decline in job quality and the economic security of workers and families accelerated. We've seen time and again how businesses and workers benefit when employers make the choice to pay their workers a decent wage and offer benefits, invest in their training and development, and foster a culture of respect and worker agency. Research demonstrates that a job that is well-designed contributes to greater company efficiency and high work quality, as well as job satisfaction, retention, and lower employee turnover.²⁵

EOP's Good Companies/Good Jobs initiative, a legacy program from the Hitachi Foundation that also has work housed within the MIT Sloan School of Management, has documented and promoted strategies that simultaneously produce outstanding outcomes for their businesses and their frontline workers. The initiative has lifted up examples of high road companies that achieve these dual levels of success – companies such as [Sunrise Treatment Center](#), an addiction treatment center in Appalachia, and



[Optimax](#), a manufacturer of precision optical components in Rochester, New York. By providing higher than average industry pay, comprehensive benefits, and a supportive work culture, Sunrise Treatment has achieved a remarkably high employee three-year retention rate of 70% while growing the business significantly and maintaining a high standard of care. Optimax, which is an employee-owned company that shares profits with its workers, has also achieved considerable growth in recent years, driven in part by a culture that values employee input and development.

Another example from EOP's work demonstrating the effects of good job design is a formative evaluation of a new approach to job design by the [Illinois Manufacturing Excellence Center](#) (IMEC). IMEC, a federally funded Manufacturing Extension Partnership in the Chicago area, helped small- and mid-sized manufacturing companies improve job quality by integrating human capital development strategies promoting worker engagement, stability, and productivity with product- and process-improvement strategies. Businesses that participated in the pilot increased sales, reduced costs, and decreased staff turnover while workers saw their wages rise and retention increase.²⁶

Recently, we've had the privilege to learn from and collaborate with other firms thinking about job design and job quality. Our colleagues at the [National Fund for Workforce Solutions](#) and [Workforce & Organizational Research Center](#) (WORC) have developed [job quality outcome maps](#) that illustrate the design choices businesses face and results they can achieve when jobs are designed with worker well-being in mind, as well as a [job design framework](#) that outlines four basic pillars of job design. Our partners at [IDEO](#) have also pioneered work in job design through the [Worker Voice Design Lab](#), in which they partnered with employers to implement practices that centered workers' voices, experiences, and expertise to help develop and implement new technologies in the workplace.

Research on job design and our conversations with business leaders, labor organizers, economic and workforce development practitioners, academics, and government and philanthropic leaders have highlighted a vast array of issues that warrant further discussion and exploration as we work to advance the design of good jobs. Three job design issues that we will be focusing on in the coming months include the role and promise of technology, work-based learning, and employee ownership.

Technology's Influence on Job Design

Technological change is an increasingly important consideration for job design. In the last decade, fears of widespread job loss due to automation have grown. The narrative that robots are coming for our jobs is not new. Fears of technology and job loss can be traced back more than 100 years, and there are certainly many examples of occupations disappearing or changing dramatically as a result of technological development. The dominant narrative around job loss, however, masks a more



nuanced reality about the multitude of ways technology can influence work and job quality.

Technology has the potential to positively or negatively affect job creation, wages, safety, and worker engagement. For example, workers may benefit from higher wages if different or higher skills are needed because of new technology in the workplace.¹⁴ Research shows workers in manufacturing firms with robots are more likely to offer their production workers higher wages than those without robots, for instance.²⁷ Of course, new technology obviously does not guarantee workers will receive higher wages. The choices we make about how technology is utilized in the workplace and how workers are involved in those decisions is a big driver of these outcomes. Job design, which has historically situated technology as a tool for problem solving and worker productivity,⁵ provides us a useful frame for examining how technology can be adapted in ways that support businesses and workers. These issues are certainly complex, and what works in some sectors may not in others. We look forward to examining this topic more closely with our colleagues.

Work-Based Learning and Job Design

The role of technology in job design intersects with another job design choice – how do employers offer skills development and training in the workplace? Rapid changes in technology are resulting in an increasing need to improve workers’ digital skills. Workers’ skills development is not only a consideration for business performance and success, but also an important element that workers want in a job – the opportunity to learn, grow, and advance. Unfortunately, many workers – including the frontline workers who often need training the most – are not receiving that opportunity. Researchers at MIT found only half of workers received any employer-sponsored training in the last 12 months. People of color, temporary or contract workers, and those with lower levels of education are less likely to have access to skills development in the workplace.²⁸ The University of Phoenix’s Career Optimism Index found 52% of workers believe they need to increase their skills in the next year to continue their job. Forty percent are worried their skills will not keep pace with advancements in technology, but almost a third of workers are not confident about upskilling opportunities in their current job.²⁹

Work-based learning models such as apprenticeship can offer workers the opportunity to earn and learn at the same time. Employers are able to build a workforce with the specific skill sets and competencies they need for their business. Cross-training and job rotation are also promising practices in job design that can promote innovation³⁰ and numerous other benefits for workers and employers. However, all of these work-based learning approaches are dependent on good design.



Employee Ownership as a Job Design Choice

In addition to employee training and development, employers and businesses have a number of other pathways to designing jobs that more meaningfully engage and empower workers while also improving business performance. Employee ownership, including Employee Stock Ownership Programs (ESOPs) and worker-owned cooperatives models, offer one such pathway. An abundance of research, which we summarized [here](#) with our colleagues at Rutgers University, shows workers in employee-owned firms have higher retirement accounts and equal or better pay, benefits, and job stability than their peers.³¹ Additional [work](#) we co-authored with our colleagues at Rutgers and the Democracy at Work Initiative shows employee ownership can be a tool to address racial and gender wealth inequality.³² Businesses also benefit from employee ownership through higher productivity and more resiliency. Giving employees a stake in the business also helps create a more positive workplace culture where employees feel happier and are more likely to stay long term.³³

How firms share profits with their employees, however, is just one design choice firms make when they implement employee ownership. Other job design choices can strengthen employee engagement and provide workers with a stronger connection to the success of their firm. When designed well, employee-owned firms advance a culture of ownership. In fact, research shows that most employee-owned firms do foster this type of culture, as employee-owned companies are more likely to involve workers in decision making and allow for opportunities to provide input.³⁴

In worker-owned cooperatives, workers own and control the business and commonly participate in the management of the business using democratic practices. To support this level of participation, the business may train workers on techniques such as open book management to help them participate in financial and operational decisions. Many ESOPs also focus on developing ownership culture by giving employees more information, greater control of their work, and some involvement or influence in the businesses operations and decision making. The combination of employee ownership and a culture that listens to and involves workers in decisions, and has other fair labor practices such as good wages, drives the success of many employee-owned firms.³⁵ Though employee ownership is not applicable or suitable to all contexts, the opportunities and lessons it offers for improving job design and job quality are certainly worthy of additional exploration and conversation.

Continuing the Conversation on Job Design

Taken at face value, designing good jobs might seem relatively straightforward. Provide interesting and engaging work, pay workers well and provide benefits, offer opportunities to advance and grow, and allow workers to have a say in shaping their work and workplace. But, as we've discussed, there is much more embedded in job



design that takes commitment, resources, and planning – and it’s not just the responsibility of employers and businesses. As we work collectively to create better jobs, we need a better understanding of job design. What are the key drivers of job design? What incentivizes and inhibits businesses in designing good jobs? What can government, philanthropy, and other partners in the fields of workforce and economic development do to support businesses and employers in job design? How do we respond to technological change and the need for many workers to have better access to skills development in the workplace? How can better job design address race and gender inequities? And where can we find more opportunities to design jobs that give employees a stronger stake in the success of their firm through approaches such as employee ownership? We look forward to continuing to explore these questions in the months ahead and invite you to join us on that journey.

As part of our work on job design, we’ll be hosting a few conversations in the second half of 2022 in a mini-series, [The Job Quality Choice: Opportunities and Challenges in Job Design](#), as part of our [Opportunity in America](#) discussion series. We look forward to seeing you there.

Acknowledgments

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Endnotes

¹ Conway, Maureen, [Opinion | Unemployment Isn’t Too High — Regular Wages Are Too Low - POLITICO](#)

² Henderson, K. (2022). The crisis of low wages in the US. Oxfam America. Retrieved June 15, 2022, [The crisis of low wages in the US | Oxfam \(oxfamamerica.org\)](#)

³ Conway, M. (2018). Strategies to advance job quality. In Andreason, Prince, Greene, and Van Horn (Eds). Investing in america’s workforce: Improving outcomes for workers and employers, (17-25).W.E. Upjohn Institute For Employment Research. Retrieved July 10, 2022 [Strategies to Advance Job Quality \(aspennstitute.org\)](#)

⁴ Antonisse, L. & Garfield, R. (2018). The relationship between work and health: Findings from a literature review. Retrieved June 23, 2022 [The Relationship Between Work and Health: Findings from a Literature Review | KFF](#)

⁵ Ton, Z. (2017). The case for good jobs. Harvard Business Review. Retrieved June 23, 2022 [The Case for Good Jobs \(hbr.org\)](#)

⁶ Parker, S. & Wall, T. (1998). Early job design principles, practices, and research. In Parker, S. & Wall, T. (Eds). Job and work design: Organizing work to promote well-being and effectiveness, (1-11).. California: Sage Publications. Retrieved June 15, 2022, [\(PDF\) 1: Early Job Design Principles, Practices, and Research \(From "Job and Work Design" book\) \(researchgate.net\)](#)

⁷ Parker, S., Morgeson, F., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. Journal of Applied Psychology, 102, 403-420. Retrieved June 15, 2022 [Parker, Morgeson, & Johns \(2017\).pdf \(umn.edu\)](#)

- ⁸ Grant, A., Fried, Y., & Juillerat, T. (2009). Work matters: Job design in classic and contemporary perspectives. In Sheldon Zedock (Eds.). *APA handbook of industrial and organizational psychology* (417-453). Washington D.C.: American Psychological Association. Retrieved June 15, 2022 https://faculty.wharton.upenn.edu/wp-content/uploads/2012/06/GrantFriedJuillerat_WorkMattersHandbook.pdf
 - ⁹ David Jenkins and Richard Florida. (1997). Work system innovation among Japanese transplants in the United States. In Liker, Fruin, Adler (Eds). *Remade in America: transplanting and transforming Japanese management systems*. Oxford University Press. Retrieved August 8, 2022 [8 Work System Innovation among Japanese Transplants in the Uni.pdf \(creativeclass.com\)](#)
 - ¹⁰ High Performance Work Organization is also sometimes referred to as High Performance Work Systems or High Commitment Work Systems
 - ¹¹ Applebaum, E., Bailey, T., Berg, P., & Kalleberg, A. (2000). *Manufacturing advantage: why high-performance systems pay off*. Ithaca and London: Cornell University Press.
 - ¹² Dilip Kaushik & Ujjal Mukherjee, Ujjal. (2021). High-performance work system: a systematic review of literature. *International Journal of Organizational Analysis*. Retrieved August 11, 2022 [\(PDF\) High-performance work system: a systematic review of literature \(researchgate.net\)](#)
 - ¹³ United Food and Commercial Workers International. (8 September 2020). Three things you should know about poultry line speeds. Retrieved June 16, 2022 [Three Things You Should Know About Poultry Line Speeds - The United Food & Commercial Workers International Union | The United Food & Commercial Workers International Union \(ufcw.org\)](#)
 - ¹⁴ Stuesse, A. & Dollar, N. (24 September 2020). Who are america's meat and poultry workers. Posted to Working Economics Blog, Economic Policy Institute. Retrieved June 16, 2022 [Who are America's meat and poultry workers? | Economic Policy Institute \(epi.org\)](#)
 - ¹⁵ Oxfam America. (2015). Lives on the line. Human cost of chicken. Retrieved June 16, 2022 [Lives on the Line | Human Cost of Chicken | Oxfam America](#)
 - ¹⁶ Kleinknecht, A., Kwee, Z., & Budyanto, L. (2015). Rigidities through flexibility: Flexible labour and the rise of management bureaucracies. *Cambridge Journal of Economics*, 1-11. Retrieved June 22, 2022 [CJE-2016-Rigidities.pdf \(alfredkleinknecht.nl\)](#)
 - ¹⁷ Zhavoronkova, M., Khattar, R., & Brady, M. (2022). Occupational segregation in america. Center for American Progress. Retrieved June 17, 2022 [Occupational Segregation in America - Center for American Progress](#)
 - ¹⁸ Zhavoronkova, M., Khattar, R., and Brady, M. (2022). Occupational segregation in the America. Center for American Progress. Retrieved July 12, 2022 [Occupational Segregation in America - Center for American Progress](#)
 - ¹⁹ Levanon, A., England, P., & Allison, P. (2009). Occupational feminization and pay: Assessing causal dynamics using 1950–2000 U.S. census data. *Social Forces*, 88, 865-891. Retrieved June 17, 2022 [Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950-2000 U.S. Census Data | Social Forces | Oxford Academic \(oup.com\)](#)
 - ²⁰ Miller, C. (2016). As women take over a male-dominated field, the pay drops. *The New York Times*. Retrieved July 10, 2022 [As Women Take Over a Male-Dominated Field, the Pay Drops - The New York Times \(nytimes.com\)](#)
 - ²¹ Rothwell, J. & Crabtree, S. (2022). How COVID-19 affected the quality of work. Gallup. Retrieved June 14, 2022 [Great Jobs Report: COVID-19 and the Quality of Work | Gallup](#)
 - ²² Rothwell, J. and Crabtree, S. (2019). Not just a job: New evidence on quality of work in the United States. Retrieved July 12, 2022 [Not Just a Job: New Evidence on the Quality of Work in the United States \(gallup.com\)](#)
 - ²³ Sull, D., Sull, C., & Zweig, B. (2022). Toxic culture is driving the great resignation. MIT Sloan Management Review. Retrieved June 17, 2022 [Toxic Culture Is Driving the Great Resignation \(mit.edu\)](#)
 - ²⁴ Meister, J. (2022). The great resignation becomes the great reshuffle: What employers can do to retain workers. *Forbes*. Retrieved June 17, 2022 [The Great Resignation Becomes The Great ReShuffle: What Employers Can Do To Retain Workers \(forbes.com\)](#)
 - ²⁵ See (Ton, Z. 2017)
- Gallup. (2020). The characteristics of good jobs for low-income workers. Retrieved June 23, 2022 [The Characteristics of Good Jobs for Low-Income Workers \(gallup.com\)](#)



- Kelly, E., Rahmandad, H., Wilmers, N., & Yadama, A. (2022). Employer practices and worker outcomes. Retrieved June 23, 2022 [Employer Practices and Worker Outcomes: A Landscape Report | WorkRise Network](#)
- McDade, S. (2021). Calculating the cost of employee disengagement. Retrieved June 23, 2022 [Calculating the Cost of Employee Disengagement \(peoplemetrics.com\)](#)
- Escobari, M. (2022). 6 job quality metrics every business should know. Brookings Institute. Retrieved June 23, 2022 [6 job quality metrics every company should know \(brookings.edu\)](#)
- ²⁶ Jain, R., Lowe, N., Schrock, G., & Conway, M. (2019). Genesis at work: Evaluating the effects of manufacturing extension on business success and job quality. The Aspen Institute Economic Opportunities Program. Retrieved June 20, 2022 [Genesis at Work: Manufacturing, Business Success, and Job Quality \(aspeninstitute.org\)](#)
- ²⁷ Dinlersoz, E. and Wolf, Z. (2018). Automation, labor share, and productivity: plant-level evidence from U.S. manufacturing. US Census Bureau, Center for Economic Studies, Working Paper No. CES 18-38. Retrieved July 8, 2022, [EconPapers: Automation, Labor Share, and Productivity: Plant-Level Evidence from U.S. Manufacturing \(repec.org\)](#)
- ²⁸ Osterman, P. (2021). How American adults obtain work skills: Results of a new national survey. ILR Review, 1-30, Retrieved June 16, 2022 [How American Adults Obtain Work Skills: Results of a New National Survey - 00197939211018191 \(mit.edu\)](#)
- ²⁹ University of Phoenix. (2022). Career optimism index study 2022. Retrieved June 18, 2022 [Career Institute™ | University of Phoenix](#)
- ³⁰ Dorenbosch, L, Van Engen, M., & Verhagen, M. (2005). On-the-job innovation: The impact of job design and human resource management through production ownership. Creativity and Innovation Management, 14, 129-141. Retrieved June 10, 2022 [On-the-Job Innovation: The Impact of Job Design and Human Resource Management Through Production Ownership by Luc W. Dorenbosch, Marloes L. van Engen, Marinus Verhagen :: SSRN](#)
- ³¹ Blasli, J., Kruse, D., and Conway, M. (2019). Sharing profits and ownership with workers not only makes them happier, it benefits the bottom line too. The Conversation. Retrieved July 12, 2022 [Sharing profits and ownership with workers not only make them happier, it benefits the bottom line too \(theconversation.com\)](#)
- ³² Weisbound, J., Conway, M., Klein, J., Chang, Y., Blasi, J., Kruse, D., Hoover, M., Leverette, T., McKinley, J., Trenholm, Z. (2021). Race and gender wealth equity and the role of employee share ownership. The Aspen Institute. Retrieved July 12, 2022
- ³³ Blasi, J., Freeman, R., and Kruse, D. (2015). Do broad-based employee ownership, profit sharing and stock options help the best firms do better. BJIR, An International Journal of Employee Relations, 54, 55-82, Retrieved July 5, 2022 [Do Broad-based Employee Ownership, Profit Sharing and Stock Options Help the Best Firms Do Even Better? - Blasi - 2016 - British Journal of Industrial Relations - Wiley Online Library](#)
- ³⁴ Kruse, D. Freeman, R., & Blasi, J. (2010). Introduction. In Kruse, Freeman. & Blasi (Eds.). Shared capitalism at work: Employee ownership, profit and gain sharing, and broad-based stock options.
- ³⁵ Ibid.

