Can an Old Theory Help Solve a Contemporary Labor Crisis? Applying JCM to the Current Labor Shortage

Jeff Cohu

Lipscomb University, jeff.cohu@lipscomb.edu
Can an Old Theory Help Solve a Contemporary Labor Crisis?

Applying JCM to the Current Labor Shortage

Abstract
This article asserts that the answer to our current labor crisis may not be as challenging as it appears if management will apply an old theory (Job Characteristics Model) to our contemporary workforce challenges. The article illustrates the key dimensions of the model and provides specific leadership recommendations for applying the JCM model to our current employment environment. Finally, the article also asserts that a new employee-centric style of leadership that requires a shift in leadership values and mindset is necessary to address the labor shortage and that JCM is a useful tool to facilitate that transition.

Introduction
Labor shortages dominate our current news cycle. Headlines discussing “The Great Resignation” and defining economic terms such as “labor force participation rate” and “quit rates” have become the norm. Anecdotally, daily signs appearing in the windows of small businesses remind us that the shortage of labor is disrupting normal basic services such as dry cleaning or dining out. Suddenly, getting morning coffee through the local drive-through window is no longer a certainty.

The actual labor numbers are telling the same story. In November 2021, 4.5 million American workers quit their jobs, the highest “quit rate” ever recorded (BLS, 2021). In addition to the high resignation rate, over 10 million jobs are projected to remain unfilled in the first quarter of 2022 (BLS, 2021). The problem is more acute within traditionally lower paying industries, such as accommodations and food services. However, even the knowledge economy is experiencing this phenomenon. Industries with higher emotional labor, such as education and healthcare, are also experiencing above average quit rates (BLS, 2021). The labor force participation rate reached a low in 2020 near the beginning of the pandemic, and although it has increased, it remains below pre-pandemic levels (BLS, 2021). Many labor experts suggest that a tight labor market will continue for several years (Rockeman & Smith, 2022).

Much of the discussion in the media focuses on the causes of the labor shortage. Pandemic related issues—health concerns, lack of childcare options, and government cash aid—have all been identified as drivers of the current labor shortage (Leonhardt, 2021). Increased entrepreneurship and a growing “gig” economy are also considered factors that lead to labor
shortages (Zaman et al., 2020). Others point to shifting values about work, particularly among Gen-Z, as a trend driving the current labor market conditions (Leonhardt, 2021).

Regardless of the cause, the problem is real and unlikely to subside in the near term. This article asserts that a motivational and work design theory, the Job Characteristics Model (JCM), may provide insights to remediate the current labor challenges. Furthermore, this article asserts that values-based leadership will be critical to solving this labor crisis and that JCM is an excellent tool for implementing a human capital centric approach to leadership in these difficult times. Managing human capital in our current labor market will require business leaders who possesses the moral vision and insight to view workers as assets to be developed, and invested in, rather than an expendable commodity to consume and discard (Laker, 2021; MacArthur, 2020; Merrick, 2021). Applying JCM is a good place to start as organizations reconsider their employee value propositions.

**JCM Review**

The job characteristics model (JCM) was first proposed by Hackman and Oldham (1975) and has been taught in business schools for decades. It is an old theory of motivation and job design. The theoretical model assumes that all jobs possess a built-in level of intrinsic motivation based on the underlying characteristics of the work design, as illustrated in Figure 1. Jobs with higher levels of meaningfulness and responsibility for, and knowledge of the outcomes, are intrinsically more motivating for the worker. These three critical psychological states are enhanced and fostered by the core job characteristics of skill variety, task identity, task significance, autonomy, and feedback. Jobs with higher levels of these core characteristics achieve critical psychological states which, in turn, lead to desired job outcomes of higher levels of internal work motivation, growth satisfaction, job satisfaction, and work effectiveness. The effectiveness of the relationship between the core job characteristics and the desired outcomes is moderated by the individual’s need for growth, knowledge and skill, and other contextual satisfactions, such as pay, comfort level with coworkers and supervisors, and other factors.

**Figure 1: The Job Characteristics Model**

![Diagram of the Job Characteristics Model](image)

*Source:* (Hackman & Oldham, 1980)
The five core job characteristics are assumed to be the tools which leaders can use to optimize job design for better performance outcomes. Skill variety is the degree to which a job requires the use of many different skills and abilities. Task identity is the extent to which the job incumbent completes a whole or identifiable piece of work. The characteristic of task significance is the extent to which the job impacts the lives of others. Autonomy is the degree of independence and freedom allowed in conducting the job, and feedback is the extent to which the individual performing the job receives clear communication regarding performance. According to JCM, each of these five characteristics can be adjusted to improve the intrinsic motivation of work.

The empirical research support for JCM has remained strong, as numerous studies have provided validating support for the theory while expanding the nuanced moderating factors that affect the relationship between core job characteristics and desired outcomes (Aan, 2018; Barrick et al., 2013). Applications of JCM-based job redesign have been found to improve intrinsic motivation in numerous industries including retail, professional sales, health care, education, and service industries (Barrick et al., 2013; Judge, et al., 2000; Khakpour et al., 2018; Michailidis & Dracou, 2011; Simonet & Castille, 2020).

Human resource and organizational development professionals have long known that JCM can be used to identify jobs with low intrinsic motivation by calculating the motivating potential scores (MPS) of a job using the formula shown in Figure 2. Those jobs identified with low MPS scores are the areas in which turnover, job satisfaction, organizational citizenship behaviors, and performance, will be problematic within the organization.

**Figure 2: Motivational Potential Score (MPS)**

![MPS Formula](image)

*Source: Market Business News (2022)*

As the MPS model demonstrates, the average score of the three dimensions of skill variety, task identity, and task significance multiplied by the degree of autonomy and level of feedback provided within a job is used to determine a quantitative measure of the level of motivation inherent within the job design or MPS. Historically, many companies have used this calculation to identify jobs which are more likely to have turnover and performance issues. Using the MPS formula, lower-scoring jobs can be potentially redesigned to increase intrinsic motivation.

JCM is a particularly significant tool for small business owners who often experience greater impact from both higher and lower levels of employee engagement. Two disengaged employees within a company workforce of five thousand is a much lower business threat than two disengaged employees in a small business with seven employees. Small businesses typically struggle to compete in categories of extrinsic motivators such as wages and benefits. However, by using JCM to enhance the employee value proposition through increased skill variety, task identity, task significance, autonomy, and feedback these small businesses can level the playing field.

**JCM Illustration**

Consider the following scenario. A young man comes home from college for the summer and needs a job, so he decides to work in a small furniture factory. The business specializes in
manufacturing low-cost wood furniture products such as roll-top desks and gun cabinets that are sold mostly to large retailers such as Walmart and Sears. The young man has prior experience in woodworking and, therefore, is assigned to work in the mill, producing parts for the assembly line that constructs the standard products. The summer is the busy season for the company, so the second shift, to which the young man is assigned, often works substantial overtime. The work is physically taxing and tedious, often requiring the young man to cut boards for 10-12 hours per day, 5 to 6 days per week, at a fast pace with very few breaks. The job pays minimum wage, and the poorly ventilated factory floor is typically over 100 degrees throughout the summer months.

While the job is tedious and repetitive, it is also dangerous. About once a week an employee gets sleepy or distracted and inadvertently does something unsafe, often leading to a serious accident. Inattentiveness on this job can cost a worker a finger or a hand or worse. As a result, the company experiences both high turnover and workers’ compensation costs. The safety threat is so real that at times the young man comes to work an hour early to choose one of the few safe jobs in the rotation of millwork so that he can daydream to help pass the boredom while simultaneously staying safe. At the end of the summer, the young man is highly motivated to go back to college and thankful to be leaving the factory job. Unfortunately, approximately 70 other employees will continue to do this job with few other employment options in sight.

Now consider another scenario. The same young man comes home for another summer break and again needs a job. The owner of the furniture factory offers him his old job back, but the prospect of another summer in the hot furniture factory doing tedious millwork does not sound attractive. But this time the offer is different. The owner, who is an engineer and product designer, needs the young man to build prototypes of new products for potential expansion and for pitching to large retailers for new contracts. The fundamentals of the work in this new job are essentially the same: the young man spends the summer doing both mill and assembly work in the same hot facility, again for minimum wage, with some hard, tedious tasks such as ripping boards down to size on an industrial table saw as well as some new, even more tedious tasks, such as sanding, clamping, and gluing on the assembly side, tasks that the young man did not have to perform in his previous role.

However, the job design in the second scenario is completely different. First, building prototypes requires a high level of skill variety. Rather than performing the same repetitive task for hours on end, the young man must compute the specific raw material needed and prepare all the required parts before completing the millwork. Skill identity, which had previously been very low, was now essentially 100% as every task was performed to complete the whole process from raw material preparation to finished project. Task significance was also high, as all employees realized that the new prototypes might mean new business opportunities and increased sales for the company. The job was also performed with a high level of autonomy as the tasks required independent and flexible working conditions. Finally, the feedback loop was quick. Each week, all the employees in the plant saw the new designs and the work completed to build out the products and buyers from the potential retail customers arrived and commented on the prototypes. Despite performing many of the same tasks as the previous summer, the young man found that he really enjoyed his work as he was highly motivated and had a sense of pride in his role.
In the preceding illustration, the young man is the author, and the story is real. The author is now a middle-aged man with decades of experience in executive leadership, management consulting, and the teaching of management and leadership at the university level. Yet the principles from this long-ago work experience persist in shaping the author’s core leadership values. What the experience inadvertently taught the author is that the attractiveness of a job is not merely a function of the specific job tasks, but rather the holistic design of the job. JCM similarly applies significantly to our current labor scenario. The question for most organizations in our current labor crisis is this: “Do organizational leaders have the managerial skill and will to creatively redesign traditional jobs, workflows, and organizations to produce a more attractive employee value proposition?”

**Contemporary Applications**

To answer the first part of the above question, we must consider the application of JCM. Managers should be knowledgeable in the principles of JCM. Although the principles of JCM are taught in nearly every organizational behavior (OB) or leadership course in business schools around the world, some theoretical concepts are quickly forgotten and discarded. Organizations that are successful in improving the intrinsic motivation of their job designs often do not share the success stories as they are often considered sources of competitive advantage. In addition, successful applications of JCM within high-performing organizations is often thrown under the umbrella of strong organizational culture without deeper consideration of the elements of JCM which may be facilitating such a culture. The following are recommendations of specific leadership practices that are consistent with the application of JCM.

- **Mission, Values, and Culture Matter**
  Every industry, including those most impacted by recent labor challenges, has exceptions to the trends. Companies such as Chick-Fil-A and Costco appear to defy their industry labor trends in regard to organizational commitment and turnover rates (Cain, 2018; Danziger, 2019). What are these companies doing differently? They are focused on mission and values which, in turn, create meaningfulness in work. Meaningfulness in work improves company culture and increases job satisfaction. However, meaningfulness in work is, in JCM terms, a function of the most critical yet often underestimated element of task significance. High performing work cultures do not occur without a workforce first experiencing high task significance. Leaders need to overemphasize the importance of individual job tasks. Great organizations link individual job performance to the mission of the organization; mediocre organizations do not. This is purely a leadership function. In great organizations, all jobs are mission critical. If an organization has unimportant jobs, they should be eliminated. Otherwise, the task significance of every job must be clearly articulated. Employees need to have a reason to work that is larger than a paycheck. They need to understand that their efforts and performance have significance to others.

- **Increase Job Flexibility**
  Increased job flexibility is likely the most obvious application of JCM to our current labor crisis. Job flexibility equals autonomy. The pandemic demonstrated that a great deal of work can be done remotely. That reality will not go away. The current numbers of the unemployed are disproportionately full of single parents experiencing “care insecurity” (Heggeness, 2020). Certainly, the pandemic and related school closings and quarantine policies have exacerbated this situation. A new study by Microsoft (2022) finds that
workers, particularly Generation Z, are re-prioritizing work-life balance over every other career goal and that workplace flexibility and remote work options are now a core expectation. The 8-to-5 model of workplace scheduling is quickly becoming obsolete. Not all jobs can be remote or flexibly scheduled, and a completely remote workforce is probably not beneficial for most organizations. However, increased autonomy through flexibility in the work schedule is a major piece of demonstrating to employees that they are valued, and that work-life balance is not hollow rhetoric.

Neither does workplace flexibility mean lack of accountability; it actually allows workers to take more responsibility for the outcomes of their work, which can simultaneously increase individual motivation and organizational performance. High performers are already motivated to do good work; workplace flexibility gives them the tools to perform at even higher levels. Daniel Pink (2009) in his best-selling book *Drive*, says that future of work will not be focused on ridged schedules but rather on ROWEs (Results Only Work Environments). Applying JCM through increased flexibility would support this shift in workplace culture and lead to higher levels of employee engagement. Pink (2009) adds that “Autonomy...is different from independence.... It means acting with choice — which means we can be both autonomous and happily interdependent with others” (88). Increasing flexibility in how work is done will increase employee motivation.

**Expand Job Scope and Depth**

According to JCM theory, most employees desire increased job responsibilities. A recent study of manufacturing organizations found that issues other than pay accounted for dramatically lower turnover rates among a small set of outlier employers (McCleod & Iyer, 2021). Those issues included higher autonomy, flexibility, knowledge of work outcomes, and encouragement and incentives to develop and learn new work skills, all elements of JCM. Jobs can be enlarged both vertically and horizontally. Horizontal enlargement involves expanded skill variety, which increases both the value of the employee in the labor market and the flexibility of the organization due to creating a more versatile workforce. Vertical enlargement includes expanding the responsibility of employees, which increases task identity, task significance, and autonomy. Both forms of job enrichment are consistent with JCM and optimize the organization’s “bench strength” and overall human capital inventory.

**Increase Organizational Transparency**

Applying JCM, all jobs can attain an improved motivating potential score by increasing feedback. However, feedback is more than merely commenting on individual job performance; it is also a function of a deeper commitment to organizational transparency. Employees want to know how they are performing, but they also want to know how the organization is performing. Gen Z employees in particular want to know what their future in the organization will look like. Organizations need to increase their transparency concerning both business strategy and career development opportunities. Transparency encompasses both the feedback and the task identity elements of JCM. Jobs that cannot be enhanced in terms of skill variety, flexibility, or autonomy can always be redesigned to provide increased feedback and task identity if leaders and organizations commit to practicing greater transparency.

The second element of this question requires self-analysis by organizational leaders to determine whether they have the will to redesign jobs to be more intrinsically motivating. This
is a question of values. Do leaders truly value their employees? Leadership style and practice are personal choices that reflect personal values. Leaders who adhere to Kant’s categorical imperative avoid treating people as means to an end and understand that JCM theory assumes intrinsic human value (Kant et al., 2019). Using JCM as tool to enhance employees’ work experience is not only good business practice, but it is also the right thing to do. Fortunately, JCM has been found to strengthen leadership effectiveness and enhance proactive organizational change, meaning there is no negative trade-off in choosing an employee-centric policy. Specifically, JCM has been found to support both transformational and transactional leadership styles and is associated with higher ethical leadership (Piccolo & Colquitt, 2006; Piccolo et al., 2010). Leaders who choose to reconsider the nature and design of their job offerings will reap the benefit of better employee performance as they strengthen their employment value proposition in the current labor market.

JCM is a tangible, validated tool which can help values-based leaders execute and live out their values regarding the management of human capital. There is an adage that the difference between a strong leader and a weak leader is found in the concept of “soil versus dirt.” Strong leaders view people as soil to be nourished, enriched, respected, and valued, while weak leaders see people as dirt to be exploited, depleted, and discarded. We need leaders who view current and prospective employees as “soil” to be developed. Employees will notice the difference and make their employment decisions accordingly.

**Conclusion**

The application of JCM will not solve every challenge of our current labor crisis; there remain major macroeconomic and socioeconomic trends that will continue to make it difficult to find and retain good employees at all levels of an organization. However, the application of JCM to job design can certainly mitigate the staffing challenges at the organizational level by improving the employee value proposition. Leaders should identify improved job design practices that support the desired outcomes of increased meaningfulness of work and responsibility for, and knowledge of, the outcomes of individual work. Finally, leaders must develop the moral will to make the jobs within their organizations more attractive to both current and prospective employees. If organizational leaders can accomplish these two goals, the current labor crisis may be less challenging than anticipated. Maybe part of the solution lies in applying an old theory.

**References**


About the Author

**Dr. Jeffrey Cohu**

Dr. Cohu is an experienced management consultant, entrepreneur, and educator. In addition to his ongoing consulting practice, he currently serves as an associate professor of management and executive director of the Center for Entrepreneurship and Innovation at Lipscomb University in Nashville, TN. He is also a part-time professor of management in the graduate programs within the Broad College of Business at Michigan State University. Prior to entering academics, Cohu served in numerous senior corporate leadership roles in strategic, financial, and human resource management.

Dr. Cohu can be reached at jgcohu@lipscomb.edu.