Chapter 14
Impact of Artificial Intelligence as Part of an Organization's Diversity

Marisela Jimenez
University of Phoenix, USA

ABSTRACT

The aftermath of the global pandemic in 2020 brought many public and private organizational leaders to the whiteboard, and with a dry eraser in their hands, human leaders were expected to produce solutions, but only a few managed to write the new blueprint to protect millions of employees, customers, and students from the life-threatening COVID-19 virus. Subsequently, artificial intelligence was adopted as part of the solution to the unprecedented organizational disruptions. Nonetheless, leaders appeared to have overlooked the impact of artificial intelligence as part of an organization's diversity. This chapter provides an expansive review about artificial intelligence and diversity in the context of cultural identity, economic power, social demographics, and ethnographic communication currently not included in organizational diversity and inclusion programs.

INTRODUCTION

Despite the social movement to increase understanding regarding the construct diversity, many organizations' leaders remain uninformed, and consequently, these organizations forgo significant opportunities and benefits when they do not recruit and hire diverse talent (Catalyst, 2021). Diverse talent comprises of cultural identity, economic power, social demographics, and ethnographic communication, yet many companies' diversity and inclusion programs remain devoid of comprehensive understanding about the meaningful and historical context of diversity.

During the 2020 global pandemic, socially overt systemic issues surfaced, exposing the financial depression experienced by millions of people who lost their job in the United States (U.S. Bureau of Labor Statistics, 2021). Specifically, women with school age children were severely impacted, ethnic minorities from diverse socioeconomic communities, and young adults with or without college education

DOI: 10.4018/978-1-7998-8827-7.ch014

and insufficient savings. To ensure continued workplace production, however, companies with economic power were in position to acquire technologies equipped with artificial intelligence designed to automate work functions (Forman, Glasser, & Lech, 2020). Thus, organizations' management leaders as well as human resources professionals have the shared responsibility to review and consider the full context of artificial intelligence and its impact on diversity in the workplace.

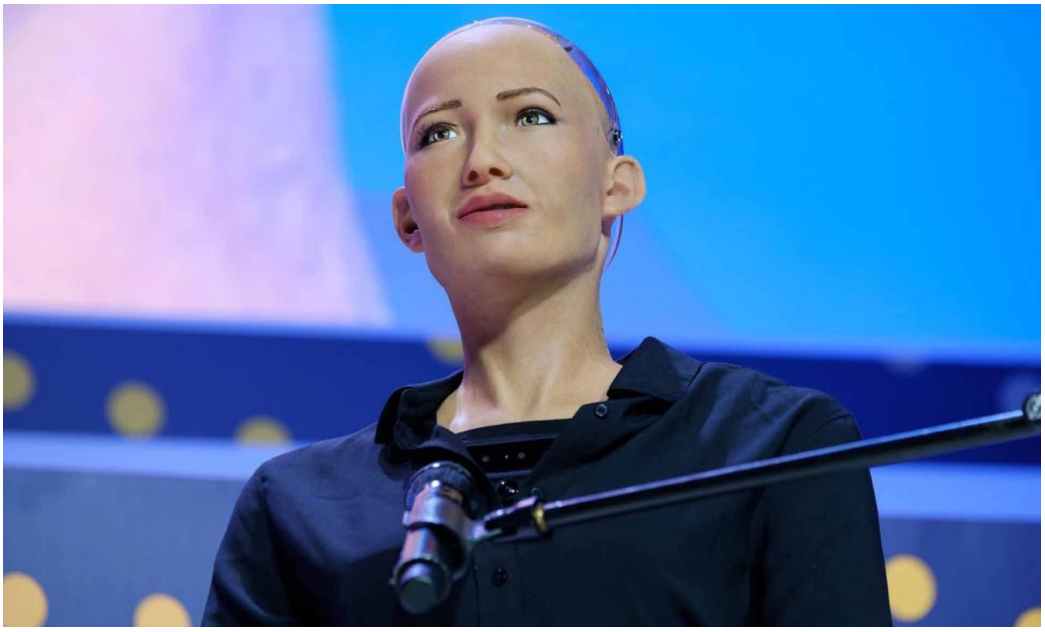
Leaders around the world were expected to provide organizational solutions to address the economic impact of the global pandemic and to prevent employees from losing their source of income, yet the process of identifying the most viable solutions in an unprecedented timeline challenged the intellect and experience of most executives in corporate and government institutions (World Economic Forum, 2019). The objective of this chapter provides readers with a socioeconomic context about the impact of artificial Intelligence as part of an organization's diversity.

BACKGROUND

Private organizations relied on government to produce safety solutions and workplace guidelines for managing their business and employees amidst the global pandemic of 2020 (Centers for Disease Control and Prevention, 2021). While most of the solutions issued by government were adopted by private businesses, there were other companies actively working to provide artificial intelligence solutions to address the human factor and the source of threat (International Federation of Robotics, 2021).

For example, Hanson Robotics, an artificial intelligence developer company located in Hong Kong, received thousands of orders to mass produce and launch one of its most sophisticated humanoids, named Sophia, to work in customer service jobs (Science and Technology, 2021). The image below illustrates Sophia, the social humanoid, built and activated, April 19, 2015, in Hong Kong by her creators, Hanson Robotics.

Figure 1.
Source: Sophia, a humanoid robot. Microsoft Bing.Com/Images.



Humanoids will continue to join organizations, not to replace human employees and take their jobs, but to protect and assist them with tasks no longer suitable for humans when faced with life threatening infectious diseases (International Federation of Robotics, 2021). COVID-19 triggered businesses to shutdown overnight, causing billions of financial losses worldwide. Only essential workers were called to duty in person and had to work long hours to meet the physiological needs of humans (NCSL, 2021). Many of these essential workers worked at grocery stores and hospitals.

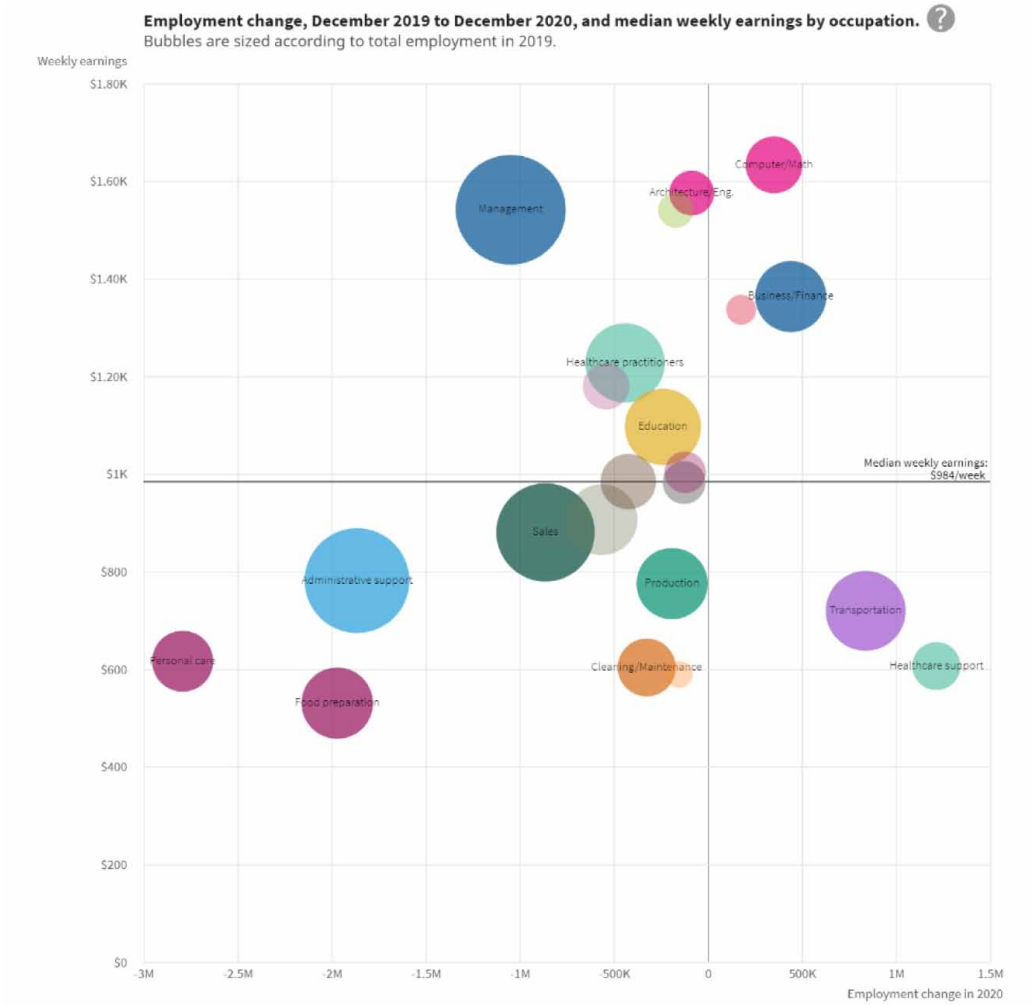
During the global pandemic, there was limited discussion concerning diversity initiatives for essential workers. Simultaneously, worldwide organizations acquired and implemented artificial intelligence systems to manage employees' remote workspace, clients' services and products delivery, and students' virtual learning (Forman, Glasser, & Lech, 2020). One of the greatest implications of adopting artificial intelligence in the workplace is that many human employees require affective support to help them cope with their heighten stress levels during the implementation of change initiatives (Jimenez, 2018).

Fundamentally, organizations' managers tasked with managing people's responsibilities, performance, and compliance, are equally responsible for ensuring the wellbeing of human employees (Carnevale & Hatak, 2020). Nonetheless, when more than 25 million people lost their job in the United States (USA Facts, 2021), a surge of mental health issues emerged, resulting from the emotional and psychological uncertainty experienced by men and women of all ages. The uncertainty of a shattered future and opportunity for gainful employment contributed to mental illness, particularly for people with asset poverty, including college students (Son, Hegde, Smith, Wang, & Sasangohar, 2020).

Accordingly, researchers found that millions of students experienced increased stress, depression, anxiety, and hopelessness when they were abruptly interrupted from their academic life and had to undergo quarantine from friends and family. Students who held jobs to help them pay for college found themselves unemployed, and without the ability to file for unemployment because of their part-time work status and lack of employer's benefits (Aucejo, Araya, French, & Zafar, 2020). Consequently, students returned home to live with their parents.

Millions of parents also experienced mental health issues when their employers laid them off or terminated their employment indefinitely. The loss of income and employment for working parents contributed to mental and emotional breakdown (Giorgi, Lecca, Alessio, Finstad, Bondanini, Lulli, Arcangeli, & Mucci, 2020). Most organizational leaders were focused on mitigating financial losses and reducing the total number of employees to cut down on payroll, total rewards, including 401K as well as other retirement plans. While many white-collar employees were concerned about losing their benefits, another group of employees were trying to qualify for public benefits when their employers' or privately owned business shutdown (U.S. Bureau of Labor Statistics, 2021). Consider the data in Figure 2 and review the group of employees impacted by the global pandemic.

Figure 2.
Source: U.S. Bureau of Labor Statistics. Employment Situation Summary.



In effect, COVID-19 is deemed the catalyst of economic disruption, social chaos, organizational workforce discrepancies, and technological acceleration. In efforts to restore economic and social equilibrium, public and private organizations' leaders engaged in unprecedented actions, leveraging the influence of technologies (Science and Technology, 2021). Prior to the global pandemic, in the United States fewer than 10 percent of employees worked in virtual office environments; that is approximately 9.8 million people holding corporate management highly paid positions while more than 90 percent, or about 131 million people remained bound to brick and mortar workplaces (World Economic Forum, 2020).

Thus, consider the impact of artificial intelligence as part of an organization's diversity in context of industries that are structurally unable to deploy enabling technologies because their services must be provided in person. Some of the technologies adopted by retail service centric companies include data analytics to best coordinate and deliver products or services (Bartika, Bertrand, Cullen, Glaeserd, Lucac, & Stanton, 2020). For example, traditional grocery shopping quickly transitioned and added

online systems to take customers' orders and to deliver customized requests via *curbside* managed by human employees.

Curbside is a service that resulted and exploded globally due to social distancing guidelines to prevent people from going inside the stores, restaurants, or business facilities (International Federation of Robotics, 2021). These newly developed services generated employment for college age youth. However, the implications of using data analytics, as a form of artificial intelligence, rendered the necessity for human capital competencies among essential workers such as grocery store clerks, restaurant waiters, and all other entry level jobs involving human employees.

At the time of writing this chapter, the United Nations' number one goal is to end poverty in all its forms everywhere by the year 2030 (United Nations, 2021). Nonetheless, the global pandemic accelerated the decline of economic progress that had been accomplished by nations' leaders committed to lifting their citizens out of poverty. In 2020, more than 71 million people experienced financial depression and deep levels of poverty. Among these people are two out of three young workers and the elderly population who may be limited from receiving any form of social protection from their family or government (United Nations, 2021). Subsequently, the opportunity for economic prosperity for millions of people becomes a farfetched reality.

Conversely, thousands of employers claimed to be unable to find workers. According to economic theories, unemployment is influenced by labor market activity (Bureau of Labor Statistics, 2021). In other words, labor demand means that employers are willing to hire a certain number of people for a specific price. On the other hand, labor supply is the total number of people willing to sell their labor for an agreed amount of compensation. The global pandemic disrupted organizational structures and the way employees work. Economists agree that job seekers who are unsuccessful in their job search become discouraged and stop looking for work.

IMPACT OF ARTIFICIAL INTELLIGENCE ON ORGANIZATIONAL DIVERSITY

Like most private and public companies, many administrators from K-12, colleges, and universities were unprepared to quickly adopt and learn the new technology tools deployed to facilitate students' distant learning. Before the global pandemic of 2020, traditionally, worldwide employees worked within the boundaries of their organization, and millions of students attended school in person. Artificial intelligence in the form of computer systems that facilitate speech recognition and access to tools for employees with disabilities such as those who are visually impaired is fundamentally critical.

Organizations that adopt artificial intelligence in their workplace to enhance levels of human performance provide employees, with special needs, opportunities to complete tasks and relieve them from potential physical or psychological harm (Asatiani, Malo, Per Rådberg Nagbøl, Penttinen, Rinta-Kahila, & Salovaara, 2021). Some manufacturing companies, for instance, have implemented Human Robot Collaboration (HRC) to accelerate output, efficiencies, and productivity. The KUKA Robotics is a German company but owned by the Chinese company Midea Group that designs solutions for manufactures by deploying industrial robots to collaborate with humans to produce flexible production.

As of 2020, in the United States, there were fewer human employees working in manufacturing positions, increasing the need to acquire artificial intelligence such as robots to occupy the vacant roles (Dowell, 2020). In effect, organizations' investment in artificial intelligence may help ensure continuity of products and services consumed by customers, but consequently, diversity and inclusion programs

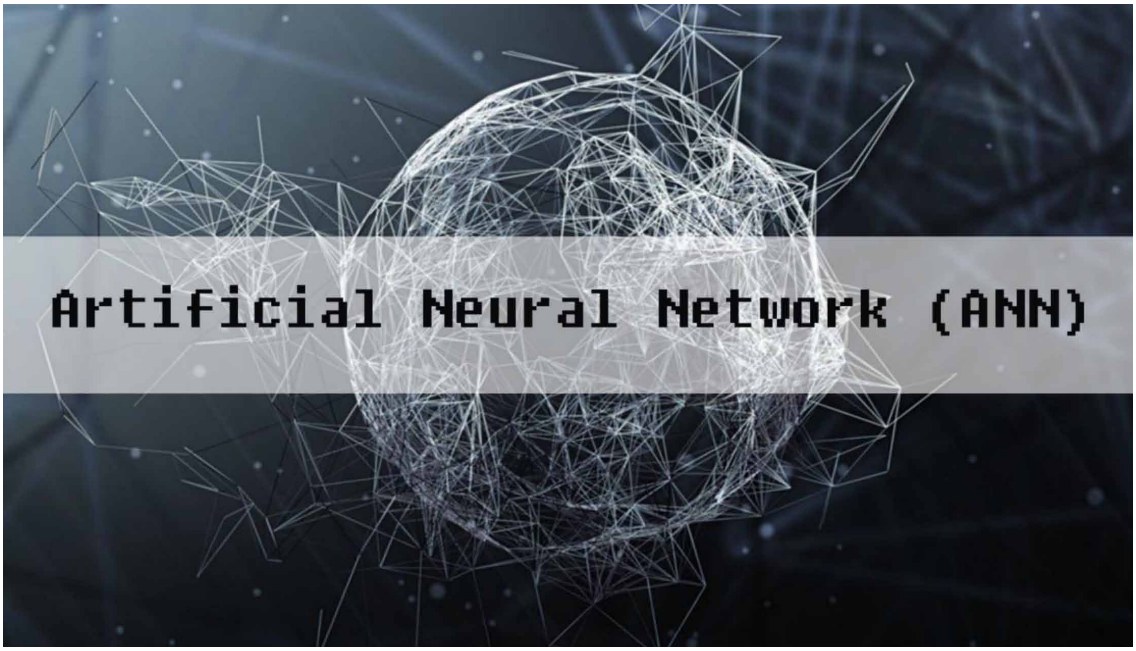
will need to be rewritten to ensure robots rendering human labor are recognized as diverse essential workers. Sophia, for example, a social humanoid became a Saudi Arabia citizen in 2017. She was also the first humanoid to be appointed United Nations Development Programme champion.

Therefore, the impact of artificial intelligence as part of an organization's diversity must be examined from a social learning theory as outlined by Albert Bandura (1977). Bandura's social learning theory explains the importance of diverse modeling to promote innovation. With the proliferation of technological developments worldwide, organizations are challenged to innovate, adopt new technologies, and run the risk to become extinct by the end of 2030. In the United States, 2020 was a year of deep financial losses when dozens of national and international companies filed for chapter 11 bankruptcy (Clifford & Wahba, 2020).

Between 2000 and 2020, there were dozens of startup tech companies built by young entrepreneurs in their 20s and 30s. Some of them are globally known such as Uber, Square, Facebook, YouTube, and Twitter. While most people refer to technology to nearly everything that is digital or connected to the Internet, computer scientists, however, are more specific with their definitions (Tianlong, Xiaohan, Wuyang, Zhangyang, & Wang, 2021). For example, computer scientists explain that one of the functions of algorithms is to optimize solutions and provide users with personalized preferences. Genetic algorithms were developed by observing the natural processes of nature as explained in Charles Darwin's theory of evolution by natural selection in his work published in1859.

Nearly everything artificially created by scientists is inspired by observation of the natural ecosystems that nature produces. The human and animal brain, for instance, is the natural model that inspired scientists to develop the Artificial Neural Networks (ANNs). Figure 3 Artificial Neural Network (ANN), as illustrated in the image below, facilitates communication between one connection to another just like the human brain's neurons engage in the same processes when sharing information.

Figure 3.
Source: Artificial Neural Networks. Microsoft Bing.Com/Images.



For computer scientists, the identical reproduction of the natural neurons remains a challenge, yet each day younger computer scientists discover ways to improve and develop the blueprint of artificial intelligence (Chakrabarty, Saakyan, & Muresan, 2021). The importance of technological breakthroughs on a particular technology has the potential to exponentially reach significant milestones before the year 2030 (Science and Technology, 2021). One of these technological breakthroughs, for example, is to teach machines such as robots or humanoids how to feel and interpret natural stimulation and respond or react to the internal and external forces in the natural environment. Figure 4 in the image below illustrates how this neural connection may be developed.

Figure 4.
Source: Simulation of A Neuron. Microsoft Bing.Com/Images.

Computer scientists want to teach machine learning to behave, communicate, and reason like humans do in their natural environment (Chakrabarty, Saakyan, & Muresan, 2021). Therefore, unlike machine learning that is programmed to perform predictable actions, humans (Bandura, 1977) are stimulated by their environment, causing them to behave in unpredictable ways because humans' experiences shaped them, and for organizational leaders, human resources professionals, and people managers, employees' diverse behavior remains a challenge, given the diversity and complexity of the human brain and employees' demographics (Jimenez, 2018).

Human behavior changes continually as the person matures and encounters new experiences (Skinner, 1961; Smith & Woodward, 1996). Each experience derives positive or negative learning that alters the

person's behavior. However, with machine learning, computer scientists have not successfully taught the machine to derive knowledge and decision making from natural experiences in the way humans do. With the help of scientists, machine learning continues to evolve, leading to the acceleration of new applications enhanced by algorithms designed to facilitate accurate decision making in nearly every industry.

For example, machine learning is used to fight the spread of COVID-19 through the application of algorithms and automation systems making it possible to manufacture, package, and ship millions of vaccines around the world (International Federation of Robotics, 2021). Accordingly, artificial intelligence and related technology have significantly contributed to the containment of the deadly virus; at the time of writing this chapter, globally, approximately 362,242 new confirmed cases were reported, averaging about 400,684 every seven-days.

The International Federation of Robotics' active contribution to worldwide technological advancements published the images of four robots designed to accelerate the production and packaging of COVID-19 vaccines and other related products, rendering machine-like production output. Every product involved in the fight of the global pandemic is manufactured and packaged by highly efficient and intelligent machines like the one shown below in Figure 5 (International Federation of Robotics, 2021).

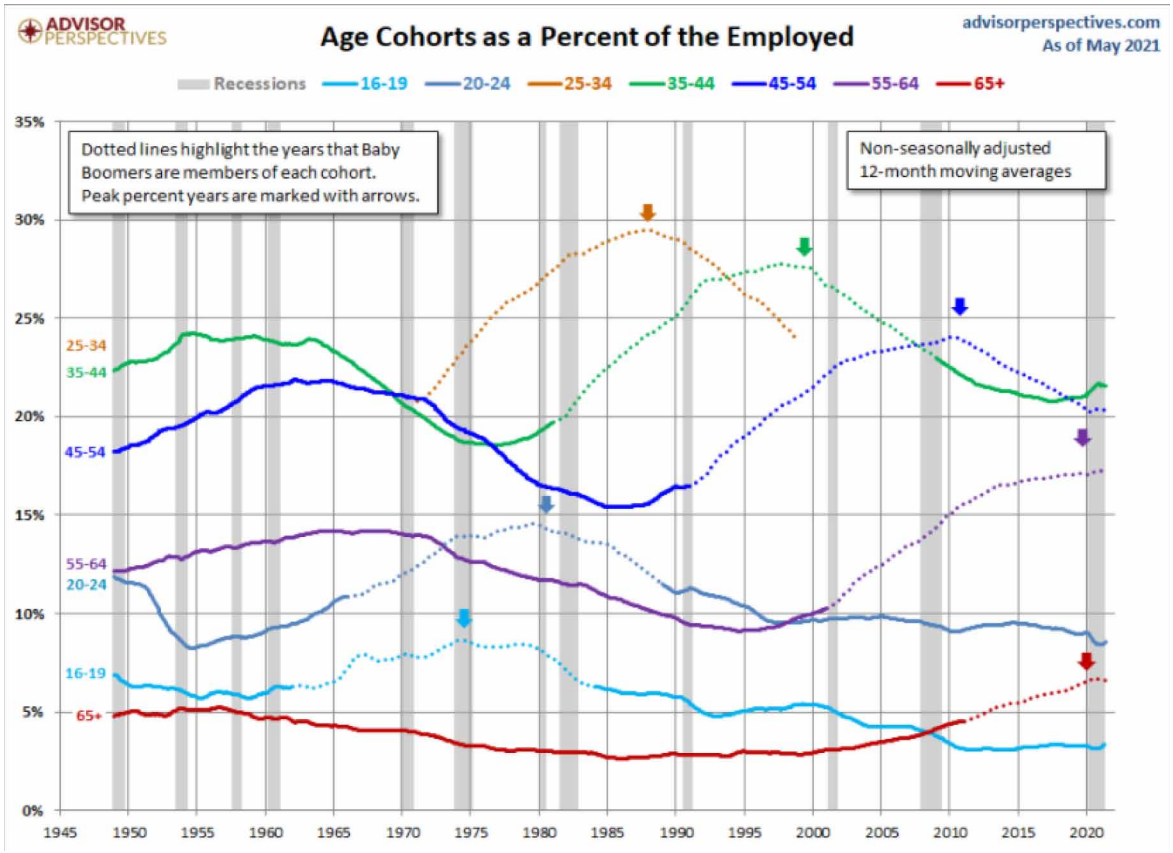
Figure 5.
Source: Industrial Robots / Robots and COVID-19. International Federation of Robotics.

The ability of intelligent machines to work at a superior speed than human employees is possible because machines are designed mathematically to predetermine input and to generate expected output without reaching physical and psychological burnout like most humans and animals do in their work environment (Tianlong, Xiaohan, Wuyang, Zhangyang, & Wang, 2021). Keep in mind that machines are created, operated, updated, and monitored by human employees. What is important to consider is that artificial intelligence serves the role of improving humans' existential quality of life by freeing humans from monotonous manual work.

The proliferation of emerging technologies requires human employees to learn, understand, synthesize new knowledge, and engage cognitive capabilities to oversee the robots' productivity and take corrective action if robots fail to render the expected output or require technical maintenance (World Economic Forum, 2019). During the global pandemic, healthcare organizations obtain enabling technologies such as expert systems to solve complex problems. The healthcare industry was unprecedently challenged with a surplus of patients and a deficit of medical staff amidst the global pandemic.

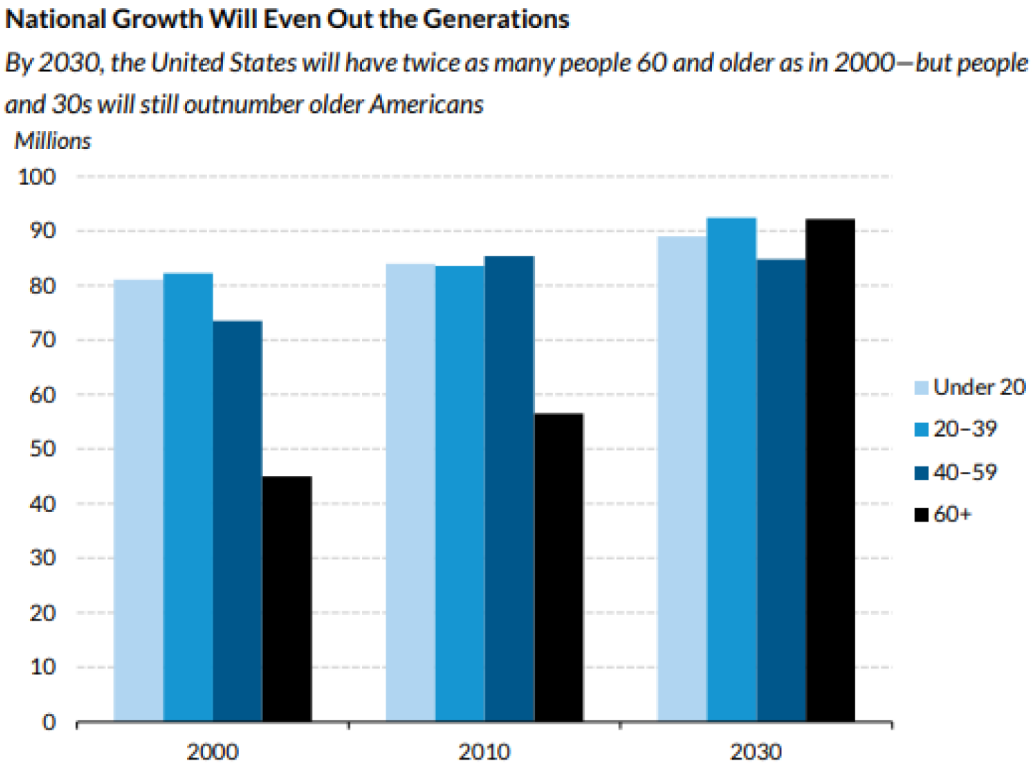
Expert systems enabled doctors to evaluate patients' illness and diagnose accurate results (Alhasan & Hasaneen, 2021). The impact of artificial intelligence as part of an organization's diversity significantly requires understanding about its benefits and limitations. Consider human employees who have worked for their organization a lifetime using years of experience to get the work done. Some of these human employees currently range between 60 and 70 years of age. For example, Figure 6 below illustrates employment years for generation baby boomers. According to U.S. Census Bureau 2020 data, a gray tsunami is scheduled to shift the United States population when approximately 73 million baby boomers reach their senior years.

Figure 6.
Source: Baby Boomer Employment. Advisorperspective.com.



To be clear, the baby boomer population was born between the years 1946 and 1964. It is estimated that by the year 2030, the youngest baby boomers will be 65 years old. Hence, consider the imminent change in the workforce as shown below in Figure 7. A younger, more educated, and diverse workforce is already emerging.

Figure 7.
Source: U.S Census, 2000 and 2010; U.S Census Bureau national population projections, 2012.



Organizations' employees age demographics in 2021 ranges between 16 and over 65 years old with the median age of 42.5 (U.S. Bureau of Labor Statistics, 2021). These employees are classified as baby boomers, gen X, Y, and Z. Each generation of employees renders a unique opportunity for organizations' human resources professionals and people managers to review recruiting, selection, hiring, and development best practices as well as total compensation plans to attract candidates that will propel the company's business priorities.

In context of the impact of artificial intelligence as part of an organization's diversity, decision making leaders within the company are presented with a blueprint to take an intelligent and objective look at their business short-and-long term strategies and realize alignment to avoid organizational decline between now and 2030 (Asatiani, et al., 2021). The sooner organizations' leaders establish their present and future business strategies, the more likely it is that they will be in position to mitigate operational and human capital deficiencies. The new business strategies cannot exclude the impact of artificial intelligence proliferation and the complexity of human employees' diverse characteristics.

For example, currently not included in organizations' diversity and inclusion programs are four dimensions of human employee diversity comprising of cultural identity, economic power, social demographics, and ethnographic communication. Generally, most organizations have adopted similar guidelines involving diversity and inclusion programs to manage their human employees. Seldom organizations' Chief Diversity Officer incorporates theoretical knowledge rationalization in managing diverse groups of employees.

Presently, most organizations' people managers in the United States remain untrained about how to effectively manage a diverse team of human employees (Jimenez, 2018). Cultural identity, for example, consists of more than a person's racial background. Frequently, human employees are grouped by common nominal demographics such as race, ethnicity, gender, age, and sexual orientation just to mention a few. However, all these obvious differences do not determine the essence of human employees' diversity. It is important to understand cultural identity in context of Social Dominance Theory.

Essentially, the Chief Diversity Officer and people managers continue to maintain the organization's status quo by classifying human employees into groups according to their demographics. The persistence of human employee classification only reinforces exclusive practices that highlight differences rather than similarities. For example, the development of Employee Resource Groups (ERGs) facilitates human employee diversity stereotypes by nature of homogeneous acknowledgment. The organizing of groups of people by their unique preferences invalidates the intention of inclusivity.

Humans are social beings socialized to build associations that validate their individual identity for approval and status within the group (Bandura, 1977; Smith & Woodward, 1996). Hence, cultural identity is significant in the life and experiences of any human being. For this reason, organizations' leaders in charge of managing human employees ought to examine the implications of cultural identity within the organization to ensure human employees are not arbitrarily perpetuated into sub-groups because of their demographics. For example, when adopting diversity and inclusion programs, there should not be social dominance within any diverse group.

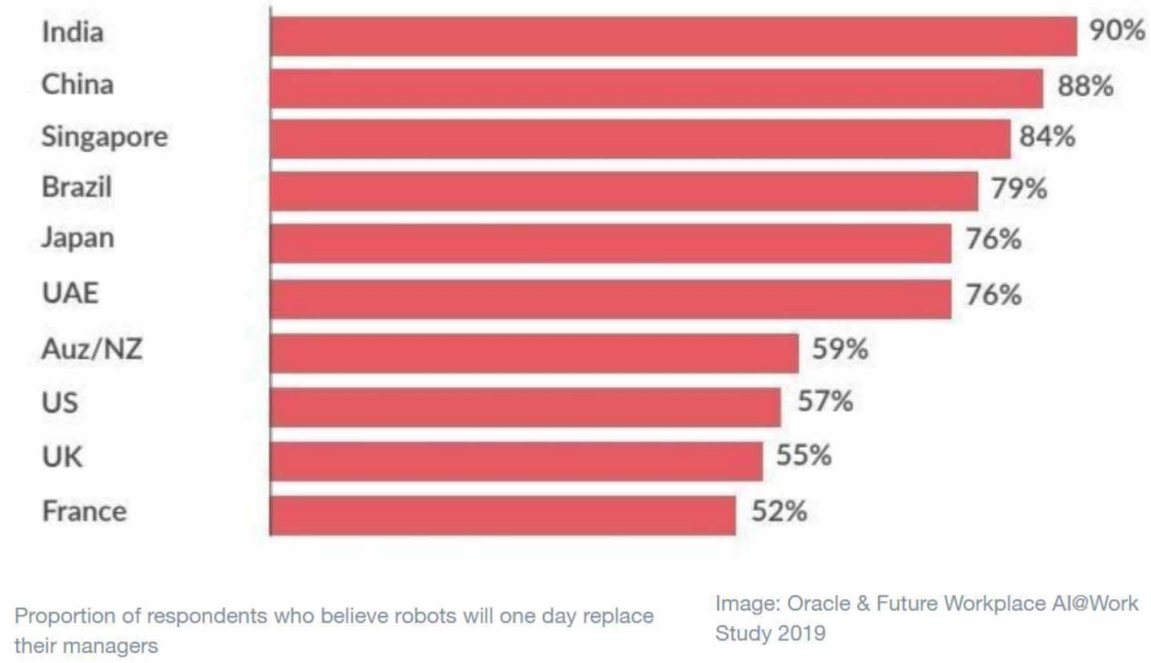
Social dominance is seldom challenged in organizations because of established cultural norms. Most organizations engage in social dominance when human employees are placed in power position because of their senior years as compared to junior human employees. As well, gender remains a social dominance in organizations, subjecting the opposite sex to abide to the cultural norms. The social status that is given to human employees because of their age or gender perpetuates the cycle of exclusivity. Therefore, human resources professionals' best practices must be examined and updated to ensure that those managing human employees disengage from social dominance actions.

The subtleties of social dominance often are overlooked because of cultural and social conditioning. Social dominance theory serves to create awareness about unquestioned behaviors in the workplace. To ensure equitable best practices in a post-pandemic business environment, organizations' leaders must engage in removing persistent barriers that result from hierarchical structures in society and groups, and human resources professionals are responsible for disrupting socially constructed norms that categorize diverse human employees into sub-groups.

Human employees can no longer be seen as commodities in the workplace and classified as if they were Lego toys. Fundamentally, the impact of artificial intelligence as part of an organization's diversity renders broad opportunities for human employees' cultural identity when their core competencies are appropriately cultivated within the company. For example, Figure 8 below illustrates the proliferation of artificial intelligence in some of the most economically developed countries. It is imperative that

organizations' people managers prepare human employees to welcome the collaboration of robots as their colleagues.

Figure 8.
Source: Oracle & Future Work AI@Work Study 2019



Additionally, with the acceleration of technologies and automation systems, human employees are presented with the opportunity to upskill and develop new core competencies that will help organizations remain competitive and sustainable in a highly digitalized global market economy (World Economic Forum, 2019). However, organizations with limited financial resources are at great risk of economic and human capital decline.

The economic power of organizations is attained by the capacity and intellectual capabilities of their human employees and technical output of modern technologies. Therefore, human employees from diverse backgrounds and with relevant capabilities are more likely to ensure organizational success amidst the technological revolution taking place at an accelerated rate. It has been said that what took 100 years to innovate and improve societies will happen in only a decade. By 2030, computer scientists believe that artificial intelligence will work side by side with human employees and enhance managers' administrative responsibilities (World Economic Forum, 2019).

In context of the impact of artificial intelligence as part of an organization's diversity, economic power poses disparities for women in the workplace. Thus, human resources professionals are encouraged to critically consider the implications of artificial intelligence in the workplace where women hold roles and responsibilities that traditionally accentuate their gender. In 2021, millions of women around the world had not returned to work because they are their family's caregivers and support system for chil-

dren's remote learning, given that many schools do not have the physical infrastructure to safely resume classes to full capacity (Catalyst, 2021).

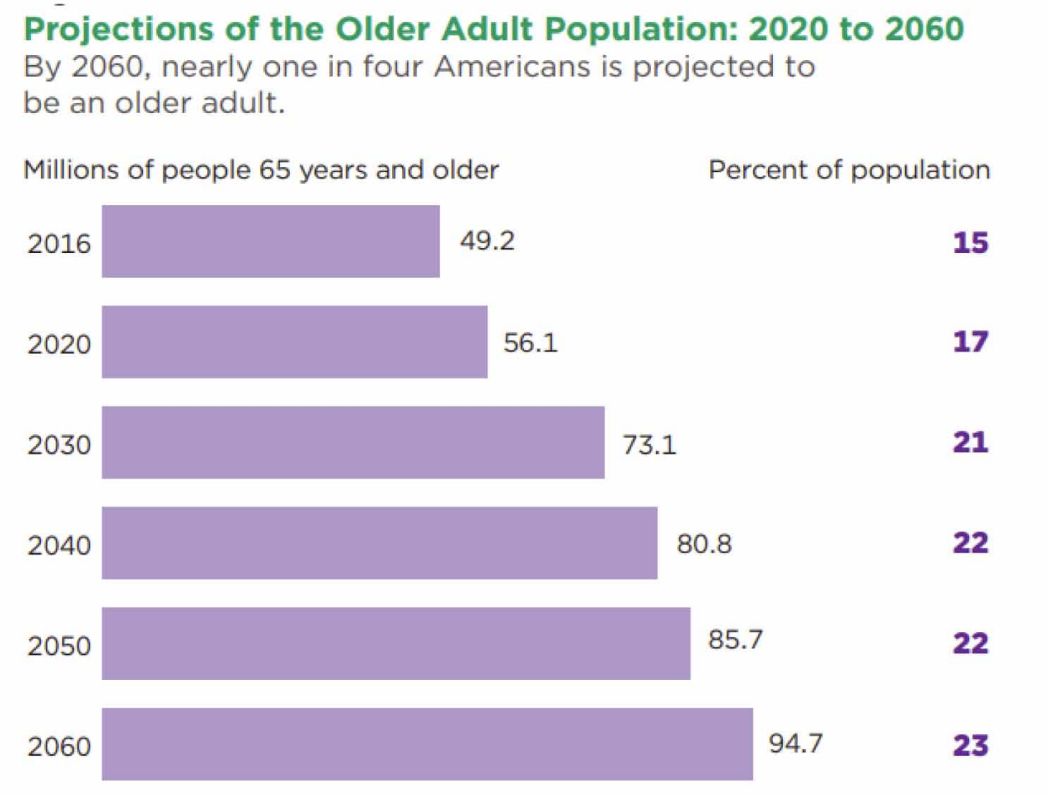
Consequently, women are penalized for their gaps in employment. Economists explain that women are penalized for motherhood choices as they often depart from work or take family medical leave when daycare is not affordable (Budig & England, 2001). Historically, women have received lower salaries than their male counterparts across social demographics. The United States remains one of the nations where women do not have access to maternity paid leave (Catalyst, 2021). Consequently, the global pandemic impacted women's careers in unprecedented ways.

Women who worked in hospitality rendering functional services experienced greater economic setbacks (USA Facts, 2021). Therefore, industry's leaders need to evaluate their recruiting, selection, hiring, and talent development best practices to ensure women available to work are not inadvertently disqualified from equal employment and fair compensation. Women who receive equal employment opportunities and are fairly compensated disrupt the cycle of poverty in their family, communities, and society. Governments worldwide are socially and economically responsible for the wealth of their country and the welfare of their citizens (World Economic Forum, 2020).

The provision of policies that promote economic power for citizens serve to address social inequalities not only for women in the workplace but for emerging new generations. Organizations' leaders are accountable for ensuring women are developed, promoted, and provided with the right access to resources to remain skilled as artificial intelligence absorbs many of the administrative functions completed by women (Bourgault, Buvinic, Kenny, O'Donnell, & Yang, 2021). The principles of economics are undeniable when organizations prosper because of their human employees' output, and subsequently economic activity increases along with consumers' confidence and purchasing power.

In 2020, the United States experienced thousands of people from every background in collective protests, against racial injustice, leading to global awareness about the systemic issues that have kept many ethnic minorities in vulnerable positions (United Nations, 2020). These protests have contributed to legitimizing the social status of marginalized communities in the United States. Accordingly, organizations' human resources professionals are charged with revising their diversity and inclusion programs to ensure equity for millions of Americans who have been historically denied of equal opportunities in the workplace. The emerging trends cannot be overlooked by public and private institutions. Figure 9 below illustrates the current and emerging diverse population in the United States.

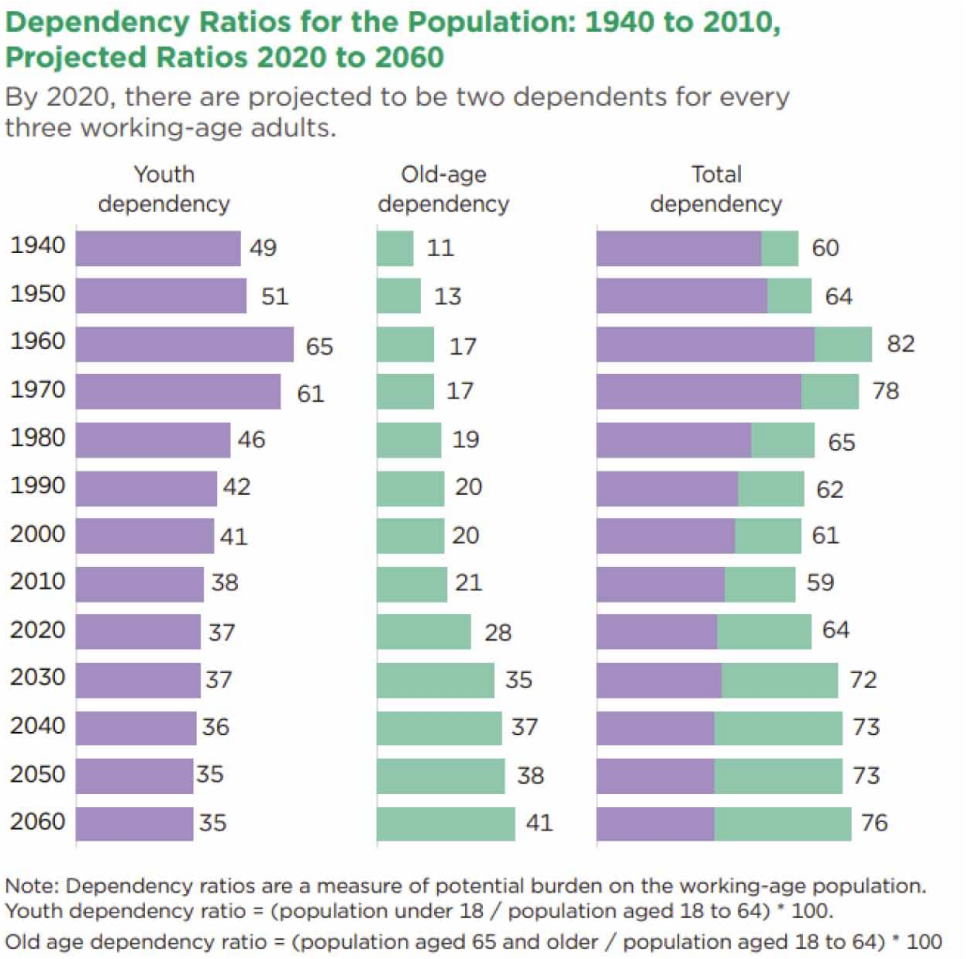
Figure 9.
Source: U.S. Census Bureau, 2017 National Population Projections



Understanding the significant changes of social demographics is critical in helping organizations' people managers to effectively manage diverse human employees. Moreover, it is projected that by 2025, investment in artificial intelligence will exceed 232 billion U.S. dollars (ITU, 2018). Fundamentally, organizations' leaders will be increasingly challenged to be nimble, transformative, and rapid learners to ensure continued business success amidst the rapid morphing of technologically driven global markets

and changing demographics. The impact of artificial intelligence as part of an organization's diversity, therefore, cannon be underestimated. Figure 10 below illustrates the ongoing social demographic shifts.

Figure 10.
Source: U.S. Census Bureau, 2017 National Population Projections, 1940-2012



Population Estimates

The impact of artificial intelligence as part of an organization's diversity may present socioeconomic risks when human employees from diverse social demographics are dominant in one group such as low-income communities, minorities, and single parents who may not have the available resources to develop new skills to qualify them for employment opportunities, leading to a distinct discrepancy in equity between the haves and the have nots (United Nations, 2021). Furthermore, human employees who have spent more than 20 years in the workplace may experience greater challenges than human employees who are just beginning their careers.

For example, human employees between the age of 20 and 30 may have been socialized to play with technologies since birth, helping them to experience technology as ubiquitous in their daily life (Clark, Judge, & Picton, 2021). Conversely, human employees who became exposed to technology in their adult years may experience peaked levels of uncertainty as they learned that their work responsibilities will be automated or embedded with artificial intelligence (Statista, 2021). Organizations' people managers, nonetheless, are in a critical intersection to unlearn traditionally held beliefs about controlling the workplace environment to influence human employees to produce output.

In the 21st century, people managers are expected to think, behave, and make decisions that are strategic, transformative, and collaborative to ensure human employees comprised of diverse backgrounds, culturally and intellectually, are included in the organization's business strategic goals (House, et al., 2020). Changes in social demographics has and will continue to disrupt internal and external business environments. The current and future people manager, including human resources professionals, will need to learn to speak a culturally and socially diverse language to avoid engaging in inequitable actions.

Most organizations' diversity and inclusion programs superficially discuss cultural and social differences but do not interpret the implicit and explicit variation of how human employees communicate, the symbolic meaning of the spoken words, and how cultural and social identity is deeply embedded in ethnographic communication (Hynes, 1964). Human employees are expected to be proficient communicators, exhibit effective interpersonal relationships, and comply with the organization's cultural norms.

However, human employees have been culturally socialized since birth through their family traditions, beliefs, values, language, and symmetrical perspectives (Hynes, 1964). Thus, if the organization's Chief of Diversity Officer desires to lead effectively and successfully transform the human employee experience within the walls of the modern enterprise, previous diversity and inclusion programs must be radically revised to ensure that ethnography of communication framework is included.

Human employees cannot be classified as if they were a basket of different fruits where apples go with apples, and bananas go with bananas, and grapes go with grapes. This is an absurd way of understanding diversity in most organizations, and unfortunately, these practices have only perpetuated human employees' differences, profiling them as people of color, people of ethnic populations, and people of homogenous sexual preferences. Additionally, as implementation of new technologies are deployed, people managers must pay close attention to the affective responses, verbal, and non-verbal communication of all human employees (Jimenez, 2018).

Furthermore, people managers must develop cognitive and theoretical understanding about the social and cultural asymmetrical status among human employees in context of ethnography of communication to prevent arbitrary biased behaviors. The global pandemic created unprecedented challenges but also revolutionized opportunities for every private and public organization (Forman, et al., 2020). The year 2021 has been established as a year of renewed hope, vision, and collective effort to rebuild, innovate, and transform how people live, work, and relate to each other during social and economic adversity. Thus, the impact of artificial intelligence as part of an organization's diversity will continue to provide both challenges and opportunities for leaders in every industry, but only those who embrace, adopt, and remain nimble will take the lead in the new technological revolution where artificial intelligence will be ubiquitous, influencing the life of most human beings.

Artificial Intelligence Challenges and Opportunities

Human employees working with artificial intelligence to foster improved performance render new capabilities within their organization. By experiencing improved ways to complete tasks and produce higher levels of output, without the physical or psychological burnout that results from extended work hours, human employees will gain access to maximize their scarce resource—time, and therefore, invest it in activities that enhance wellbeing and overall lifework balance. Emerging human talent such as the Z generation are technology users and intellectually adept to exist in a virtual space of communication, ecommerce, learning, and relationship interactions (Aucejo, et al., 2020).

To attract emerging human talent, organizations' comparative advantage must include boundaryless and innovative access to resources that allow human employees to accomplish their work supported by artificial intelligence systems. For more than a century, organizations' executives worldwide have continued to engage Frederick W. Taylor's scientific management theory to measure and control employees' performance.

However, it is imperative to revise management and leadership best practices, philosophies, behaviors, and traditional hierarchical structures to ensure emerging human talent is inspired and supported to innovate and to serve as transformational catalysts for technological breakthroughs designed to advance society's prosperity while satisfying their organization's business priorities. The future of work demands collective intelligence and collaboration between human employees and robots created with capabilities currently undeveloped by humans (Clark, et al., 2021).

Accordingly, a younger, more educated, technology adept, and diverse workforce is already emerging, but the inclusion of artificial intelligence is necessary to help every organization remain competitive in a computer-generated market economy, accelerated by the 2020 global pandemic. Organizations neglecting to innovate and acquire artificial intelligence to support human talent capabilities will fast-track their business life cycle's extinction.

Business Implications and Considerations

The oil and gas industry, for example, will continue to be challenged until newly redesigned business solutions are developed and implemented to serve the emerging markets with environmentally conscious preferences for clean air and socially responsible products that exceed customers' experience. In like manner, technology companies will be required to frequently upgrade artificial intelligence models and security measures to mitigate the threats of highly advanced anonymous groups of cyber attackers and worldwide technocrats' intrusion. To best understand artificial intelligence as part of an organization's diversity, stakeholders need to comprehend the psychology of human behavior.

Oftentimes, human employees are evaluated by subjective metrics to determine their value and contribution to the organization. Employees rendering low output are classified in the performance hierarchy as average. Most people managers, then, reference human employees' performance evaluation results to determine the employees' next steps for improvement. During the 2020 global pandemic, reputable organizations leveraged human resources best practices to streamline their workforce and to provide early retirement packages for those qualified employees. Many employees were not so lucky and were terminated because of low performance. Human diversity, in this context, comes to question because artificial intelligence has and will continue to outperform human employees.

Management Requirements Moving Forward

Researchers in the field of human psychology have rendered empirical contributions to explain human behavior, their evolutionary stages, and their limitations (House, Patricia, Clark, Tanya, Senay, Crittenden, & Silk, 2020). Nonetheless, most organizations' people managers have retained expired human resources manuals that outline how to discipline human employees when they do not comply with the company's performance expectations. The global pandemic of 2020 shed new light about organizations management practices and the treatment human employees received when they were classified as non-essential in their position. In the United States, 25 million employees lost their job.

However, human employees working in the hospitality industry were greatly impacted because their services were rendered in person to customers. Human employees working in hotels, restaurants, bars, movie theaters, coffee and bakery shops, beauty salons, and massage spas, for example, were jobless overnight. Many of these human employees were women. Not only they lost their paid jobs, but they also found themselves assuming non-paid jobs they had not prepared for prior to the global pandemic. When schools closed, teachers were without the digital tools to teach their students, but with the implementation of artificial intelligence systems, and with the help of the student's parent, teachers managed to deliver their distant learning curriculum.

CONCLUSION

Fundamentally, the impact of artificial intelligence as part of an organization's diversity renders disproportional benefits for humans with limited knowledge and training on technologies. For example, many parents from low-income demographics were unsuccessful in helping their children with their online school curriculum. Despite the schools' parenting training programs, across the United States, thousands of school age students ceased attendance because they found it difficult to learn and complete assignments through virtual classes. Another group of human employees that continued to work despite the threat of COVID-19 spread were residential refuse collectors. Therefore, the waste management industry has opportunities to adopt artificial intelligence to relieve human employees from jobs that humanoids may do. Most residents may seldom consider the workers riding the trash truck several times per month to ensure their community remains cleared from waste. Notwithstanding, the future technologies designed to promote healthy ecosystems and streamline efficiencies, as well as recycling may soon be part of most residential and commercial buildings. Artificial intelligence, when designed and adopted, may be required to be accessible and cost effective for all organizations. Artificial intelligence developers may need to consider organizations' human employees' cultural identity, economic power social demographics, and ethnographic communication within the realm of cultural diversity to prevent unintended consequences such as perpetuation of inequalities. In other words, when new technologies replace manual work completed by human employees, organizational leaders need to consider the affective reaction of employees and establish contingency strategies to support employees whose job was replaced through the automation of artificial intelligence systems. Accordingly, the impact of artificial intelligence as part of an organization's diversity requires political, economic, social, technological, legal, and environmental analysis to fully evaluate and understand the benefits and the implications within the internal and external organization's stakeholders.

REFERENCES

Alhasan, M., & Hasaneen, M. (2021). Digital imaging, technologies and artificial intelligence applications during COVID-19 pandemic. *Computerized Medical Imaging and Graphics, 91*, 101933. doi:10.1016/j.compmedimag.2021.101933

Asatiani, A., & Malo, P., Nagbøl, P. R., Penttinen, E., Rinta-Kahila, T., & Salovaara, A. (2021). Sociotechnical envelopment of artificial intelligence: An approach to organizational deployment of inscrutable artificial intelligence systems. *Journal of the Association for Information Systems*, *22*(2), 8. doi:10.17705/1jais.00664

Aucejo, E. M., Araya, M. P. V., French, J. F., & Zafar, B. (2020, June 1). *The impact of covid-19 on student experiences and expectations: Evidence from a survey*. Retrieved from https://www.nber.org/system/files/working_papers/w27392/w27392.pdf

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Bartika, A. W., Bertrand, M., Cullen, Z., Glaeserd, E. L., Lucac, M., & Stanton, C. (2020, June 23). *The impact of COVID-19 on small business outcomes and expectations*. Retrieved from https://www.pnas.org/content/pnas/117/30/17656.full.pdf

Bourgault, S., Buvinic, M., Kenny, C., O'Donnell, M., & Yang, G. (2021, April 1). *Promoting Women's Economic Empowerment in the COVID-19 Context.* Retrieved from https://www.cgdev.org/sites/default/files/promoting-wee-during-covid.pdf

Budig, M., & England, P. (2001). The Wage Penalty for Motherhood. *American Sociological Review*, *66*(2), 204–225. doi:10.2307/2657415

Bureau of Labor Statistics. (2021, October 1). *The employment Situation*. Retrieved from https://www.bls.gov/news.release/pdf/empsit.pdf

Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, *116*, 183–187. doi:10.1016/j.jbusres.2020.05.037 PMID:32501303

Catalyst. (2021, February 21). *Women in the Workforce: Global (Quick Take).* Retrieved from https://www.catalyst.org/research/women-in-the-workforce-global/

Centers for Disease Control and Prevention. (2021). *COVID-19*. https://www.cdc.gov/coronavirus/2019-ncov/community/index.html

Chakrabarty, T., Saakyan, A., & Muresan, S. (2021, September 10). *Don't Go Far Off: An Empirical Study on Neural Poetry Translation*. Retrieved from https://arxiv.org/pdf/2109.02972.pdf

Clark, C., Judge, T., & Picton, I. (2021, August 1). *Video game playing and literacy: A survey of young people aged 11 to 16*. Retrieved from https://www.academia.edu/45433790/Video_game_playing_and_literacy_a_surv

Clifford, L., & Wahba, P. (2020, October 8). *A running list of companies that have filed for bankruptcy during the coronavirus pandemic.* Retrieved from https://fortune.com/2020/08/04/companies-filing-bankruptcy-2020-due-to-covid-list-filed-chapter-11-coronavirus-pandemic/

Dowell, E. K. P. (2020). *Connecticut Case Study: Attracting skilled manufacturing workers a challenge as aging baby boomers retire*. https://www.census.gov/library/stories/2020/11/manufacturing-faces-labor-shortage-as-workforce-ages.html

Education Data.Org. (2021). *Student Loan Debt Statistics*. Retrieved from https://educationdata.org/student-loan-debt-statistics/

Forman, A. S., Glasser, N. M., & Lech, C. (2020). *Insight: Covid-19 May push more companies to use AI as hiring tool*. Bloomberg Law. https://news.bloomberglaw.com/daily-labor-report/insight-covid-19-may-push-more-companies-to-use-ai-as-hiring-tool

Giorgi, G., Lecca, L. I., Alessio, F., Finstad, G. L., Bondanini, G., Lulli, L. G., Arcangeli, G., & Mucci, N. (2020). COVID-19-Related Mental Health Effects in the Workplace: A Narrative Review. *International Journal of Environmental Research and Public Health*, *17*(21), 7857.

Global Development and Environment Institute. (2006, November 3). *Theories of Unemployment*. Retrieved from https://resources.saylor.org/wwwresources/archived/site/wp-content/uploads/2010/11/Theories-of-Unemployment.pdf

House, B. R., Patricia, K., Clark, B. H., Tanya, B., Senay, C., Crittenden, A. N., & Silk, J. B. (2020). Universal norm psychology leads to societal diversity in prosocial behaviour and development. *Nature Human Behaviour*, *4*(1), 36–44.

Hymes, D. (1964). Introduction: Toward Ethnographies of Communication. *American Anthropologist*, *66*(6), 1–34. doi:10.1525/aa.1964.66.suppl_3.02a00010

International Federation of Robotics. (2021). *Robots Help Fight the Battle Against COVID-19 Pandemic.* Retrieved from https://ifr.org/ifr-press-releases/news/robots-help-fight-the-battle-against-covid-19-pandemic

ITU. (2018, September 1). *Assessing the Economic Impact of Artificial Intelligence*. Retrieved from https://www.itu.int/dms_pub/itu-s/opb/gen/S-GEN-ISSUEPAPER-2018-1-PDF-E.pdf

Jimenez, M. (2018). *Leadership style, organizational performance, and change through the lens of emotional intelligence.* doi:10.2478/fman-2018-0018

Mahesh, M. (2021, August 3). Impact of E-Commerce during COVID-19 Pandemic Situation in Kerala. *International Journal of Scientific Research (Ahmedabad, India)*, *10*(8), 3–5. https://www.ijsr.net/get_abstract.php?paper_id=SR21728100831

Mislinski, J. (2021, June 11). *Baby boomer employment*. Retrieved from https://www.advisorperspectives.com/dshort/updates/2021/06/11/baby-boomer-employment-may-2021

NCSL. (2021, January 11). *COVID-19: Essential workers in the states*. Retrieved from https://www.ncsl.org/research/labor-and-employment/covid-19-essential-workers-in-the-states.aspx

Science and Technology. (2021, February 23). *Company aims to produce thousands of humanoid robots in 2021*. https://learningenglish.voanews.com/a/company-aims-to-produce-thousands-of-humanoid-robots-in-2021/5752308.html

Sherzer, J. (1983). *Kuna ways of speaking: An ethnographic perspective*. The University of Texas Press.

Skinner, B. F. (1961). Why we need teaching machines. *Harvard Educational Review*, *31*, 377–398.

Smith, L. D., & Woodward, W. R. (1996). *B. F. Skinner and behaviorism in American culture*. Lehigh University Press.

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study. *Journal of Medical Internet Research*, *22*(9), e21279. https://doi.org/10.2196/21279

Statista. (2021, May 1). *Frequency of using social media as a news source in the United States as of May 2021, by generation*. Retrieved from https://www.statista.com/statistics/1124159/us-generational-social-media-news/

Tianlong, C., Xiaohan, C., & Wuyang, C. (2021, March 23). *Learning to Optimize: A Primer and A Benchmark*. Retrieved from https://arxiv.org/pdf/2103.12828v1.pdf

United Nations. (2020, June 22). *Racial discrimination in the context of the covid-19 crisis*. Retrieved from https://www.ohchr.org/Documents/Issues/Racism/COVID-19_and_Racial_Discrimination.pdf

United Nations. (2021). *End poverty in all its forms everywhere*. Retrieved from https://sdgs.un.org/goals/goal1

U.S. Bureau of Labor Statistics. (2021a, January 22). *Labor Force Statistics from the Current Population Survey.* Retrieved from https://www.bls.gov/cps/tables.htm#charemp_m

U.S. Bureau of Labor Statistics. (2021b, Jun 4). *Employment Situation Summary*. Retrieved from https://www.bls.gov/news.release/empsit.nr0.htm

U.S. Bureau of Labor Statistics. (2021c, January 22). *Labor Force Statistics from the Current Population Survey*. Retrieved from https://www.bls.gov/cps/cpsaat18b.htm

U.S. Census. (2019, December 10). *2020 Census Will Help Policymakers Prepare for the Incoming Wave of Aging Boomers.* Retrieved from https://www.census.gov/library/stories/2019/12/by-2030-all-baby-boomers-will-be-age-65-or-older.html

U.S. Census Bureau. (2021, February 1). *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf

U.S. Department of Labor. (2021). *Coronavirus Resources*. https://www.dol.gov/coronavirus

U.S.A. Facts. (2021, February 22). *Which workers were most affected by job loss in 2020?* Retrieved from https://usafacts.org/articles/which-workers-were-most-affected-by-job-loss-in-2020/

Valentic, S. (2020, August 20). *Waste 360™. Compology CEO Jason Gates and Michael E. Hoffman, Stifel managing director, discussed how waste is one of the "perfect" industries to incorporate AI*. https://www.waste360.com/fleets-technology/how-artificial-intelligence-can-enhance-waste-collection

World Economic Forum. (2019, November 15). *How artificial intelligence is redefining the role of manager.* Retrieved from https://www.weforum.org/agenda/2019/11/how-artificial-intelligence-is-redefining-the-role-of-manager/

World Economic Forum. (2020, March 21). *Working from home was a luxury for the relatively affluent before coronavirus - not anymore*. Retrieved from https://www.weforum.org/agenda/2020/03/working-from-home-coronavirus-workers-future-of-work/

KEY TERMS AND DEFINITIONS

Affective Support: Intentional and empathetic dialogue to dispel uncertainty and to help establish a sense of employment safety.

Diverse Talent: Human employees within four dimensions comprising of cultural identity, economic power, social demographics, and ethnographic communication.

Essential Workers: Human employees assigned to businesses to satisfy human physiological needs.

Humanoids: Human like machines designed to assist or protect human employees.

Human Employees: Human beings with intellect, emotions, and behaviors as well as specialized yet limited capabilities.

Lifework Balance: Activities comprising of personal rewards as well as a sense of self-actualization.

Technocrats: Pluralist groups with ideals about controlling the creativity of artificial intelligence innovators.