


# Chapter 7

## Supporting Workforce Wisdom in a Global Economy

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### **ABSTRACT**

*An aging workforce brings unique challenges and opportunities, requiring an understanding of how different age groups approach the workplace and employ thoughtful strategies to bridge generation gaps. It is crucial to identify wisdom held by experienced workers and develop strategies for passing knowledge on to less experienced employees. Training mature workers for the 21st century workplace is important; however, helping all employees to unlearn outdated processes or beliefs is equally vital to ensure growth and innovation. Organizations need to foster a climate of acceptance and appreciation for all workers and their contributions regardless of age. Workplace policies and procedures should be reviewed and updated to ensure no bias against mature workers is present. Community and public resources can be accessed to train and support mature workers as well. Recognizing the element of wisdom in the workforce and learning how to leverage that wisdom is key to success in the knowledge economy.*

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## *Supporting Workforce Wisdom in a Global Economy*

### **INTRODUCTION**

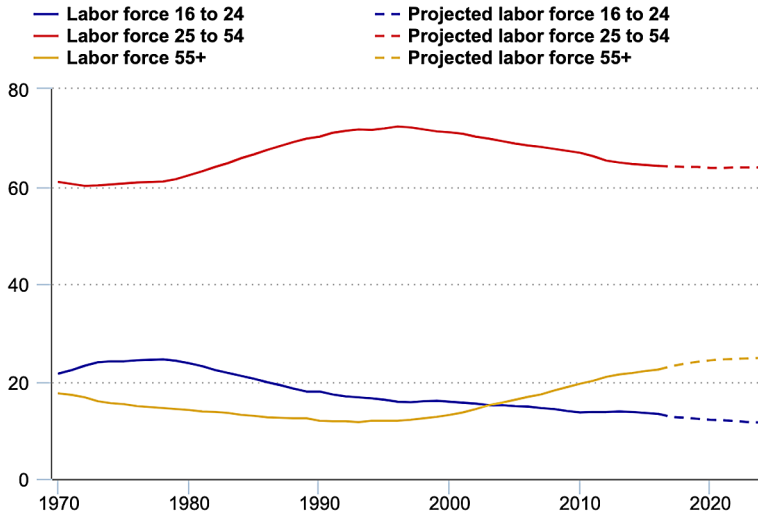
The objective of this chapter is to introduce wisdom as an important aspect of a growing, global knowledge economy and recommend strategies for how to support organizational efforts to foster a climate of acceptance and appreciation for all workers regardless of age. This chapter explores our organizational and societal capacity to support a growing mature workforce while at the same time exploring avenues to foster wisdom in the exponentially expanding knowledge economy. Allen and Hart (1999) warned two decades ago that “human resource development and human performance (HRD/HPT) professionals have assumed that the workforce of the future will be similar to the current workforce predominantly made up of 35-50-year olds” (p. 91). The 76 million Baby Boomers (born 1944 –1964) are currently between 55-75 years of age, while the 82 million GenXers (born 1965 – 1979) are currently 40-54 years old. Twenty years ago the needs of mature workers were a minority concern; today human resources (HR) professionals are facing a mature workforce bubble with little indication of how to best leverage and retain workers who have garnered a lifetime of knowledge and wisdom.

According to a 2017 publication by the U.S. Bureau of Labor Statistics (BLS), about 40 percent of people ages 55 and older were working or were actively looking for work in 2014. This trend is expected to increase for those 65 and older through the year 2024, but participation rates for the other age groups in the labor force are not projected to change much over that same time period. By 2024, BLS projects that the labor force will grow to approximately 164 million people comprised of about 41 million people who will be ages 55 and older, and about 13 million who are expected to be age 65 and older. These changes in workplace demographics necessitate a different approach toward solving organizational challenges by better understanding our workplace composition and devoting attention to the mature workforce as a driving force of wisdom. The following charts from the BLS (2019) highlight these workforce strains (Figures 1 and 2). In the US and around the world, healthcare standards have expanded and longevity is increasing. Employees have an increased ability to participate in the workforce much longer than it was expected even two decades ago. Additionally, increases in general communication connectivity, flexible work time, and virtual workplaces provide additional incentives for employees to work across many different conditions of health, lifestyle and location.

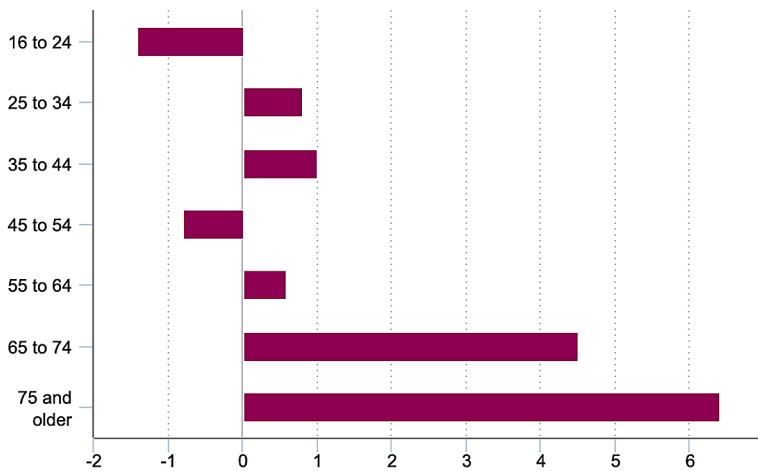
These incentives are not only a benefit to the employee, but also to employers as they are able to retain their mature workers longer and not risk losing their collective knowledge and wisdom. Mature employees also remain in the workforce longer due to their need to continue financially supporting their adult children and/or offset financial losses from the economic crash of 2008. Sewdas et al. (2017) conducted a qualitative study to explore the motives retirees at the age of 65 or

**Supporting Workforce Wisdom in a Global Economy**

*Figure 1. Labor force participation by age*



*Figure 2. Projected growth in labor force by age*



above returned to work and/or were self-employed. Jiri (2016) summarized these reasons in several domains: purpose in life, financial benefit, health, social influence, skills and knowledge (such as learning new skills or passing down their abilities), and work characteristics (such as working from home or working part-time). All of these reasons combined lead to more generations being required to work together in a single workforce.

### ***Supporting Workforce Wisdom in a Global Economy***

This chapter delves into the ever changing dynamics of the 21st century workforce and provides avenues and suggestions for managing unique workforce dynamics. Five interlinked topics are covered to provide insight toward an overall goal of facilitating workforce wisdom in a global workforce:

1. **Workforce Dynamics and 21st Century Skills** examines the most pressing needs for equipping current and future workers to collaborate effectively with co-workers and supervisors one, two, or even three generations older than themselves. In the new multi-generational, global workforce differences in work styles, communication preferences, and cultural understanding can become core workplace problems if not addressed in a timely and effective manner. Additionally, reviewing employee skills is essential to understanding the unique set of circumstances present in the US workforce as it consists of a large number of Baby Boomers striving to stay relevant and involved in the changing workforce as economies become more global and knowledge-based.
2. **Workforce Wisdom** delves into the concept of developing knowledge as well as facilitating the interexchange of wisdom in the workplace. Wisdom is not confined to a singular segment of the workforce. Regardless of age, it can be fostered through shared learning, deliberate attempts to engage all employees, and systematic understanding of organizational learning and knowledge development. Workforce wisdom extends beyond what is understood of learning organizations and managing knowledge.
3. **Unlearning** is described not as forgetting, but rather as the process of selecting models and paradigms that improve outdated ones. These improved models and methods can then better match the changing workplace demographics and provide opportunities to engage the workforce and foster wisdom through appropriate policies, practices, and norms.
4. **Policies, Practices, and HR Considerations** discusses how HR departments and leaders are encouraged to audit an organization's policies and practices to advocate for age-specific, age-inclusive HR efforts, and establish an approach to change in the workplace that is more centered on the individual. These proactive steps will allow employers to rewrite their standards, reconsidering what has been effective and what has become obsolete while also creating an inclusive organizational culture that values all employees and their contributions. This can then become a source of competitive advantage.

### *Supporting Workforce Wisdom in a Global Economy*

5. Public and Community Resources prescribes the need for joint responsibility between individuals, employers, and the public sector in equipping older workers with tools for remaining active in the workforce longer. Private and governmental organizations, career counselors, community colleges, and libraries are all key sources for meeting the need for continuing education in the 21st century workforce and global economy.

## **BACKGROUND**

Wisdom is an integral part of the information science field and has become key in the current knowledge economy. Ackoff's (1989) Data Information Knowledge Wisdom (DIKW) model illustrates the process of learning as starting with data, which leads to information, then knowledge, finally resulting in wisdom (as cited in Rowley, 2007). The DIKW model has been used since the mid-1980s, guiding the field of information science to study critical components and the hierarchy of needs within the field. The aspects of data, information and knowledge within the DIKW hierarchy have been heavily researched and even developed into specialized academic programs (e.g., data science, information science, and knowledge management). The study of wisdom, however, has been neglected thus far.

This chapter serves as a call for research on a prominent part of the DIKW hierarchy and a key element of information science - wisdom. An analysis of the last five years of the Journal of the Association for Information Science and Technology (JASIST) publications reveals that only two articles focused on wisdom, yet even the scope of this research was much broader than wisdom and did not define wisdom. One of the two publications was a research article focused on "crowd wisdom" and the other was a book review focused on leveraging wisdom from a crowd. Although both publications discuss wisdom, they do not address individual wisdom or explain what it entails.

The study of wisdom is difficult to both investigate and understand. This does not mean that there has not been any research conducted on wisdom; it simply implies that there is a lack of research concerning wisdom within the field of information science, especially in relation to the DIKW hierarchy. Definitions of wisdom vary and mostly stem from a philosophical perspective within individual disciplines. The fields of gerontology, psychology, and social science attempt to study the phenomena of wisdom but have little significant impact on clarity or understanding it in the context of information science.

Rowley (2007) does well in comparing different interpretations of the DIKW hierarchy definitions, presented by Ackoff (1989). Zeleny defines the hierarchy in the following terms: with data, you know nothing; with information, you know

### ***Supporting Workforce Wisdom in a Global Economy***

“what”; with knowledge, you know “how”; and with wisdom, you know “why.” Ackoff presents the model differently: data are a series of symbols; information is data produced to answer the who/what/when/where/why questions; knowledge is the application of the data and information; and wisdom is evaluated understanding of everything leading up to this point (as cited in Rowley, 2007). Through these definitions, wisdom, as a broad concept, has been explained, but a substantial gap in understanding remains. Further research is needed into what experiences lead to wisdom and what characteristics comprise it. Knowing what leads to one being wise and what attributes wise individuals possess is lacking.

## **WORKFORCE DYNAMICS AND 21ST CENTURY SKILLS**

According to Jiri (2016), the differences between generations can affect the way corporations recruit and develop teams, deal with change, and manage employees. In addition, it can motivate and stimulate employees, boosting productivity, competitiveness, and effectiveness of service. Having a number of generations in the workforce enriches the organization but it can also introduce bias so workers need to understand the composition and driving forces of each generation. Traditionalists are those born 1945 and before; Baby Boomers were born between 1946 and 1964; Generation X includes those born between 1965 and 1976; Generation Y (also known as Millennials) includes those born between 1977 and 1995; and Generation Z (also known as iGen) consists of those born 1996 and later (The Center for Generational Kinetics, 2016).

Although the aforementioned generational labels are, indeed, valid, some studies suggest that the use of these labels leads to negative impacts for mature workers in the areas of hiring, training, and respectful treatment in the workplace (Cox, Young, Guardia, & Bohmann, 2018). The same approach may be applied in postsecondary education and training settings as well. When stereotypes and labels are created, various assumptions based upon these labels can lead to great divisiveness and an incohesive working culture and climate. Employees of all generations play essential roles in the productivity of the organization for which they work; however, as time progresses, mature workers such as the Baby Boomers are not always given the opportunity to adapt to or even lead organizational changes. Rather than assuming that mature workers are reluctant or not interested in modifying old habits and processes, they should be given equal opportunities to learn innovative approaches and techniques when needed and desired. Furthermore, a person’s age does not necessarily define her level of technological competence or willingness to learn new skills.

### ***Supporting Workforce Wisdom in a Global Economy***

Cebulla and Wilkinson (2019) conducted a case study involving different approaches employed by businesses to promote age-confident practices in three European countries. The United Kingdom, Germany, and Spain each emphasized occupational health and implemented gradual retirement. Differences included age-neutral practices in the United Kingdom led by legislation, a focus on collaboration between employers and trade unions in Germany, and a low business level of activity in Spain. With respect to training the workforce, their approaches differed as follows: the United Kingdom and Germany focused on mixed-age (workplace specific) skills-transfer training, with the UK implementing intergenerational skills transfer through mentoring and Spain implementing a campaign for mature workers to be engaged as “workplace leaders.” These findings reveal the individualized nature of workforce challenges and emphasize that adaptations need to be made in the context of each country or organization to better evaluate and respond to the complexities of each work environment and more accurately resolve the challenges faced by its global, dynamic workforce.

Irrespective of a learner’s age or generational label, 21st century learning should be engaging, relevant, and personalized. According to the most recent *21st Century Framework for Learning* (Battelle for Kids, 2019), the most essential learned skills all successful employees should hone include creativity and innovation, critical thinking and problem solving, communication, and collaboration. The framework also suggests that successful workers will need to possess the following skills: flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility. Mature workers are stereotypically known for being self-directed and responsible leaders; however, several studies suggest that mature workers experience difficulties collaborating, being flexible, and displaying cross-cultural skills with those who may not look like them or those from dissimilar personal backgrounds. Therefore, 21st century skills should be a major component of professional development practices in all working environments. Even though employees have cultural differences and represent different walks of life, many behaviors and soft skills can be modified and nurtured throughout the workplace by using effective training techniques and organizational learning processes. However, this type of learning requires inclusive support systems to help engage learners through the use of innovative technologies and real-world connections. Isolation and heavy use of divisive age-related labels disrupt this process and create a less cohesive learning environment (Batelle for Kids, 2019). Encouraging effective collaboration, displaying mutual respect regardless of age, and influencing wisdom across all generations in today’s workforce are crucial to organizational success.

### *Supporting Workforce Wisdom in a Global Economy*

## **WORKFORCE WISDOM**

Wisdom is a uniquely human quality demonstrated through an ability to apply introspection, experience, and sound judgment in conjunction with applicable data, information, and knowledge to create a course of action leading to beneficial and productive decisions for both individuals and society. Bergman (2018) noted “the beauty of wisdom is that it is available to all. Wisdom doesn’t care what school you attended, and it doesn’t care about race, creed, or color. Wisdom is real and authentic, which is why no one ever speaks of ‘artificial wisdom,’” (p. 1, para 7). Interestingly, Staudinger (1999) found no relation between age and wisdom or judgment, instead pointing out that “A complex pattern of personal characteristics and experiential features have to coalesce in order for wisdom to emerge” (p. 641). Over the next several decades, wisdom, creativity, and compassion may become a final dominion of humans. A pathway from information and knowledge to wisdom will provide a significant competitive advantage that workforce professionals can leverage to uniquely contribute to the global knowledge economy. Characteristics of wisdom may include: active listening, understanding, self-awareness, broad objectivity, discernment, vision, flexibility, learning, ethical behavior, systems understanding, multi-level problem-solving, knowledge sharing, compassion, experience, and adversity. These characteristics can be observed in individuals from every race, creed, color, and society. When linked and enhanced, these characteristics can foster not only a knowledgeable workforce, but a workforce that leverages wisdom to provide deep understanding of data, information, and knowledge, ultimately providing wise advice within organizations. While a “wise” person is a unique golden nugget found in an organization, aspects and characteristics of wisdom can be bolstered to enhance a corporate workforce in this dynamic and changing knowledge economy.

Schwab (2015) stated that the Fourth Industrial Revolution “is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human,” (p. 1, par 3). The exponential increase in artificial intelligence (AI) dependent technology blurs conventional lines and leaves many questions concerning the unique place of humans in the workforce of a knowledge economy. From a knowledge management standpoint, data is programmable and algorithmic whereas wisdom is both non-programmable and non-algorithmic (Awad & Ghaziri, 2004). Though fear of the mass-automation of work and AI domination may not be realities in our lifetime, the reality of jobs being replaced with automation - or knowledge-based technology - certainly will be in the future. This would reposition people in different types of jobs that require compassion, creativity, and wisdom, characteristics that are distinctly human, and that should be fostered at work, through collaboration and shared learning. Our



### ***Supporting Workforce Wisdom in a Global Economy***

understanding of humans' unique role in the creation of new products, materials, and knowledge may become key to our workforce development activities in the coming decades. The exponential increase in data, information, and knowledge demanded by our future workforce requires that humans be more concerned with the higher principles of knowledge and wisdom than with the patterns of data and information, which are more programmable and algorithmic.

Wisdom is a compilation of human attributes. It requires a person to not only have the characteristics of wisdom, but also to demonstrate competency in exercising them. The building of characteristics associated with wisdom (e.g., social factors, self-awareness, and depth of understanding) may provide the pathway to wisdom. In creating that path, a definition of wisdom allows us to know what real wisdom is so we can determine how a greater percentage of the population might attain it. The pathway to creating wisdom allows for human experiences that develop within the individual. How can one be open to new experiences without experiencing them? How can one demonstrate spirituality or a sense of humor without deeper connection and meaning to those experiences?

## **UNLEARNING TO LEARN**

The concept of unlearning in organizations is not new. Becker (2005, p. 661) defined unlearning as “the process by which individuals and organizations acknowledge and release prior learning (including assumptions and mental frameworks) in order to accommodate new information and behaviors”. Fernandez and Sune (2009) differentiated between accidental learning that could occur as a result of data loss and intentional unlearning as a process signifying a gap between the current state and the desired state. Thus, intentional learning is championed by individuals. Becker (2010) studied 189 employees in an Australian government-owned corporation operating within the energy industry to determine factors that hinder or help the unlearning process during times of change. Those factors included: understanding the need for change, the level of organizational support and training, assessment of the change, positive experience and informal support, the organization's history of change, individual's prior outlooks, and individuals' feelings and expectations. Specifically, Becker (2010) advocated that understanding the process of unlearning would assist in selecting an appropriate intervention. Cegarra-Navarro, Sánchez-Vidal and Cegarra-Leiva (2016) explored a new model that explains how managers create a continuous organizational context for unlearning in order to eliminate outdated knowledge for small and medium-sized enterprises (SMEs) trying to implement a Work-Life Balance culture. They found that the unlearning context had an indirect effect on innovation-related outcomes through work-life balance.

### ***Supporting Workforce Wisdom in a Global Economy***

Bonchek (2016) discussed unlearning as a priority for individuals and organizations. He referred to unlearning as “the ability to choose an alternative mental model or paradigm” (para 3). Bonchek illustrates how mental models constrain us through examples of obsolete approaches in strategy and marketing. The workplace is multidimensional, non-linear, and very complex, thus requiring a conscious effort to challenge organizations to explore alternative models. The author advocated for unlearning that will assist networked organizations to first eliminate old and ineffective mental models in areas such as management, leadership, and governance, and then create new models to better achieve outlined goals and ingrain new mental habits.

The growing demographic diversity in the global workforce necessitates adapting existing theories and models or constructing new ones to explain organizational phenomena. In this context, it is essential to unlearn previously held beliefs about mature workers and devise models to help resolve the new challenges of integrating the workforce and facilitating wisdom. This section overviews several models used to study mature workers in the workplace and how we make sense of their career aspirations. Specifically, as advocated by Taylor and Bisson (2019), research into applied interventions and theoretical models should include older trainees.

Fasbender, Wohrmann, Wang, and Klehe (2019) developed a late career construction theory for mature workers. This theory explores the effects of career adaptability and the aging experience on career planning, which is mediated by occupational future time perspective. This career construction theory then represents workers’ positive beliefs about the time and opportunities left in their working lives. The authors tested this theory with a sample in the United Kingdom. They asserted that in the context of changing legislation (e.g., the removal of the Default Retirement Age in 2011), late career planning is essential to having satisfaction with work. Specifically, Fasbender et al. (2019) assert that “career construction of mature workers is not only a question of their adaptability alone, but equally of how they experience the process of growing older. In other words, as mature workers look back at an extended life- and work-history, a successful career construction and active engagement with an ongoing future career entails not only their career related readiness and resources, but also a reflection of their past experiences in order to forecast and prepare for their future careers,” (p. 33). This is a significant conclusion as related to the workplace climate that should be created by organizational leaders in conjunction with HR representatives. Older workers should be allowed opportunities to learn and assess different options available to them in order to understand both monetary and non-monetary benefits of working longer versus retiring. Sewdas et al. (2017) encouraged further research into the domain of having a purpose in life that emerged as a prevalent motive of workers to continue employment beyond retirement age; thus, the authors advocate for policies that do not only focus on financial incentives but rather combine multiple factors. This

### ***Supporting Workforce Wisdom in a Global Economy***

heterogeneous approach will allow employers and governmental agencies to work in concert to offer incentives that not only facilitate a graceful retirement process but also enable continuous workforce wisdom.

Zacher and Yang (2016) developed the construct of organizational climate for successful aging (OCSA) to examine the complex relationship between employee age and focus on opportunities, encompassing job satisfaction, organizational commitment, and motivation to continue working past the official retirement age. OCSA was defined as “employees’ shared perceptions of the extent to which their organization enables successful aging” (para. 1). Successful aging facilitated through appropriate workplace policies and norms should be an important goal of organizations committed to creating a preferred employer brand and a unique employee experience. Gonzalez and Morer (2017) discussed the benefits of having mature workers participate in knowledge work, defined as “the work in which creativity and intellectual capital, together with interpersonal skills and social relationships constitute the most important raw material,” (p. 642). They also developed a theoretical framework for an inclusive workstation design guidance tool using ergonomics to focus on yielding better outcomes from universal design of products and environments for knowledge workers. This is an excellent example of how when creating an encouraging workplace environment for older workers decision makers should also consider specific physical limitations that can be easily remedied in compliance with the law.

## **POLICIES, PRACTICES, AND HR CONSIDERATIONS**

Human Resource departments and leaders are encouraged to audit their policies and practices at least annually. In addition to non-discrimination as the top priority, a review of organizational and managerial practices may reveal that some innocuous practices collectively create a climate that challenges mature workers, stifles their contribution to the workplace, and robs them of an opportunity to continue exploring and growing their careers. Boehm and Dwertmann (2015) advocate for age-specific and age-inclusive HR practices and a more individual-centered approach with respect to changes in the workplace. In addition, they explored the importance of leadership behavior and organizational climates. Zacher and Yang (2016) summarized the following as important considerations that help facilitate successful aging: policies and procedures supporting equal treatment of employees from different age groups as well as shared social norms for taking age-related changes in individual characteristics. In addition, lack of training for mature workers can be a barrier to future employment while training of current mature workers can be beneficial to an organization (Taylor & Bisson, 2019).

### ***Supporting Workforce Wisdom in a Global Economy***

Moreover, Zacher and Yang (2016) charged organizational leaders with prioritizing the successful implementation of anti-discrimination policies into informal practices. According to Taylor and Bisson (2019), organizations that understand the value of training mature workers and are able to properly train and retain this older workforce will hold a competitive edge. Furthermore, D'Amata & Hertzfeldt (2008) suggest organizations avoid discriminatory practices by rejecting the advice of scholars who suggest implementing HR strategies recognizing unique values and characteristics of each generation versus general strategies applied to all employees. Vasconcelos (2017) referred to mature workers as living memories of organizational life and concluded that HR policies should aim at creating jobs that would be preferred by mature workers. Taylor and Bisson (2019) summarized integrative research on fluid intelligence, referred to as the ability to apply and problem solve to master novel information, and crystallized intelligence, where the learner can draw on prior learned information. Mature workers do demonstrate both fluid intelligence and crystallized intelligence, which are crucial to building wisdom.

Sewdas et al.'s (2017) findings summarizing that older workers prefer working part-time over working full-time, and that they like to have flexibility in working hours, were aligned with prior research. Employers should allow opportunities for their mature workers to share their motives for remaining employed in order to better understand their needs and determine whether or not they can make a business case for reduced work hours, flexible arrangements, and more autonomy in order to garner wisdom from these mature workers. Many mature workers will also appreciate the opportunity to share their expertise and knowledge while continuing to contribute to the organization.

Age discrimination is prevalent in many countries and industries, signaling a serious and pervasive problem for organizational leaders. Kroon, Van Selm, ter Hoeven, and Vliegthart (2018) used content analysis to study a sample of news media alongside corporate media files of 50 large-scale organisations in the Netherlands with at least 850 employees. The researchers found that older employees were associated with warmth stereotypes, such as reliability and commitment, but negatively associated with competence stereotypes, such as productivity and adaptability. In their comparison of corporate and news media, it appears that negative stereotypes of mature workers emerged more frequently in the news. This is an important finding in the context of the constantly evolving workplace and mature workers should not be automatically excluded from change implementation simply based on such negative stereotypes as lack of adaptability or delayed productivity. Many of these employees have likely participated in numerous change efforts throughout their employment and could be an invaluable source of wisdom.

### ***Supporting Workforce Wisdom in a Global Economy***

Dean Lee, Zikic, Noh, and Sargent (2017) sought to understand how organizations react to retirement and changes in workforce demographics by interviewing HR managers from 16 organizations in Canada and 8 organizations in Australia, representing three different sectors: financial services, extractive natural resources (oil, gas, mining), and high-tech manufacturing. Among two other dimensions summarizing organizational approaches to retirement, they found that organizations 1) implement changes in HR retirement policies and practices which greatly emphasize the interaction between HR managers and employees, and 2) line managers have a continuous exchange with employees about the retirement process. This finding further highlights the critical role of immediate supervisors. HR representatives are strongly encouraged to seek input from line managers regarding their mature workers and also coach the managers as the need arises to ensure that organizational values are being demonstrated properly. Scholars such as Dimitrova and Scarso (2017) also emphasized the importance of collaboration and creation of knowledge driven by technological change. They discussed crowdsourcing in Knowledge Management (KM) and concluded that “the use of crowdsourcing seems to favour the evolution of KM towards a more open, collaborative, conversational, and knowledge-creation-oriented approach.” (p. 293). In order to foster wisdom, as organizational leaders and employees, we need to create a workplace environment conducive to the creation and dissemination of knowledge that includes everyone within the organization. Internally, our policies and procedures as well as norms dictate how favorably or unfavorably we treat employees and how we design a hierarchical structure that either encourages or discourages cooperation, knowledge creation, and shared learning. In the next section we will employ an external perspective to describe and discuss how we support the development of our workforce through various resources. Through both internal practices and policies and public and community resources collectively can we encourage and enable workforce wisdom.

## **PUBLIC AND COMMUNITY RESOURCES FOR WORKFORCE DEVELOPMENT**

The full responsibility for adapting to the needs of aging workers does not fall on individual businesses. Generally, training workers is viewed as a joint responsibility between individuals, employers, and the public sector (Cummins, Kunkel, & Walker, 2015; MacArthur Foundation Network on an Aging Society, 2012). Community-sponsored support programs provide specific training as well as raise awareness of the importance of continuing education to stay vital in the workforce, which some mature workers may not recognize (Cummins, 2014, p. 342). Government

### ***Supporting Workforce Wisdom in a Global Economy***

organizations, career counselors, community colleges, and libraries are all key sources for meeting this need.

## **Government**

Although most government training programs are for the unemployed, for over a decade, governments around the world have been implementing various programs and initiatives to encourage inclusion and development of the aging workforce, and these have resulted in significant economic wins. In 2007, Germany introduced a program called WeGebAU to subsidize training of mature workers, enhance their employability, and help keep them in the workforce. After being accepted into the program, workers received a voucher guaranteeing reimbursement for training costs and could then enroll in any certified program. The emphasis in this training was on improving general skills rather than anything specific to a particular organization, and employers were required by the government to continue paying the employee throughout training. The program increased employment stability and job satisfaction for workers age 55 and older, including those in the part-time labor market which is increasingly popular with older employees. The outcomes of the program demonstrated that subsidized training positively influences workers to postpone retirement (Dauth & Toomet, 2016).

Similar to the German initiative, governmental subsidies in Ireland have spurred employers to provide higher levels of training (Görg & Strobl, 2006), and Sweden has implemented the Knowledge Lift adult education program producing positive effects (Albrecht, van den Berg, & Vroman, 2009). As another country-wide initiative, the Canadian government has endorsed a “productive” view of ageing, strongly encouraging people to delay retirement and extend their professional lives. Beyond the benefit to the nation as a whole, they emphasize how this helps older individuals remain independent longer, age well, and experience greater well-being (Lagacé, Nahon-Serfaty, & Laplante, 2015). Recent research in the United States shows a decline in labor force participation rates along with corresponding increases in Social Security Disability Insurance claims in the 45- to 54-year age-group, highlighting the need for policies that present opportunities for employment-related training and education programs, similar to those discussed in this chapter. These types of programs enhance basic skills sought by employers and improve health and social outcomes for the participants (Yamashita, Cummins, Arbogast, & Millar, 2018).

## *Supporting Workforce Wisdom in a Global Economy*

### **Career Counselors**

Career counselors and vocational psychologists also have a key role in supporting mature workers as they have cultivated an expanded view of aging workers and retirement. They acknowledge the changing needs of mature workers, recognizing their special challenges and concerns, and provide training and assistance. They are able to guide these individuals in reviewing their work histories and vocational goals, identifying transferable skills and interests. Counselors can help mature workers recognize vocational strengths and weaknesses, address areas for growth, and refine resumes (Russell, 2007). A comprehensive assessment can help these individuals recognize past experience and training as valuable and begin seeing how those can be applied in new workplace settings. Specific services provided may include personal assessments of work and goals, values, interests, and abilities, an overview of the rights of older workers, and education on retirement options. These types of programs may consist of planned practicum experiences to offer exposure to new work experiences for workers, while at the same time help to reduce age-based bias in organizations. Research suggests that this type of counseling for individuals 45 and older helps them to recognize career development as an ongoing, lifelong process (Lytle, Clancy, Foley, & Cotter, 2015).

### **Community Colleges and Universities**

Community colleges and universities are vital sources of support for the aging labor force as well. Job demands have become increasingly complex, requiring all types of workers to use technology, and continuing education to stay current in most fields. Community colleges play a central role in providing occupational training and creating opportunities for workplace advancement and extension (Osterman, 2005). High-quality programs for older students focus on continuing education, facilitate program completion, and provide job placement services (Cummins, 2014, p. 338). They also help mature workers see the tangible value they can bring to the workplace and overcome the mistaken belief that age is a barrier to continued employment growth (Cummins, 2014, p. 348). Community college and university leaders alike often develop relationships with local employers to gain a better understanding of the skills they are seeking in employees so they can provide the necessary training (Cummins, 2014, p. 342). Programs like these may also offer informational interviewing, pairing a student with a local employer to give them a richer understanding of that field. Similar programs include job shadowing and mentoring (Cummins, 2014, p. 344). These types of programs may be promoted at job fairs and career expos, highlighting training opportunities, services for students, and even financial aid. Some community colleges and universities strategically use

### ***Supporting Workforce Wisdom in a Global Economy***

older students to market these programs to others, and this type of peer-to-peer promotion can help build confidence in prospective students (Cummins, 2014, p. 342).

A key support provided by community colleges is helping older students persist through completion of training programs, including flexible scheduling, academic support, financial aid, and other resources for balancing work, family, and school (Hirschy, Bremer, & Castellano., 2011). These programs often introduce unfamiliar technology to older students and provide support as they learn to use it, helping them build self-confidence. Universities have also developed more fast-paced programs, designed to be convenient for mature workers who desire additional skills, degrees, certifications, and professional confidence. Many of the programs and services offered by these postsecondary institutions for mature workers are provided free of charge or at a significant discounted rate. For example, according to their prospective websites, California State University and Mississippi State University both offer free in-state tuition for students over age 60, while the University of Connecticut and Connecticut State University both offer free in-state tuition to students over age 62. The state of Virginia even has a state mandated clause known as the Senior Citizens Higher Education Act of 1974 to ensure that students over age 60 receive tuition waivers (Virginia Decoded, 2019).

### **Libraries**

Yet another important, yet sorely underutilized, provider of training and support for mature workers is local libraries. Because libraries at their core are tasked with helping their local communities, some have recognized the needs of mature workers and seek to provide support in a variety of ways. These libraries provide training in computer applications, resume writing, online job searching, and even soft skills such as networking and building self-confidence. Mock interviews help patrons get comfortable with newer interview styles so they can successfully market themselves to employers (Cummins, 2014, p. 347). By monitoring employment trends for this age group as well as investigating the needs of local patrons, libraries can be prime locations for providing necessary training and support. Literacy and basic computing skills are specific interventions libraries could provide for mature workers as the positive relationship between employment outcomes and literacy skills has been proven. Higher literacy and computing skills are positively correlated with greater rates of employment. These skills provide a strong foundation from which workers can learn and apply new concepts (Yamashita et al., 2018). Imbedding literacy and technology-related assessments into other types of training could help to identify mature workers with a need for more support in this area (Reder & Bynner, 2009) (Yamashita et al., 2018). Because mature workers are an increasingly important part



### *Supporting Workforce Wisdom in a Global Economy*

of the workforce, understanding of their literacy skills and technology competence has become a more pressing need (Yamashita et al., 2018).

## **SOLUTIONS AND RECOMMENDATIONS**

We are living in a unique time in the United States, where the demographics of the available labor force is changing. Mature workers in the Baby Boomer generation are staying in the workforce in unprecedented numbers. With changes to social security benefits and retirement accounts, the number of workers over age 55 is at the highest since 1961 (Sheiner, 2014). The only growing population in the current available labor force is mature workers. While many workers in this population are retiring out of the labor force, the vast size of this generation, which eclipses all others, means that record numbers of mature workers continue to remain in the workforce, and surprisingly, record numbers of mature workers are re-entering the workforce after once choosing to leave (U.S. Bureau of Labor Statistics, 2019). Data from the National Longitudinal Survey of Youth 1979 also revealed that those born in the latter years of the baby boom (1957-1964) held an average of 11.9 jobs from age 18 to age 50 (U.S. Bureau of Labor Statistics, 2017). That number is expected to have increased by next reporting cycle. To add to the overall complexity and diversity of our workforce, some of these mature workers pursue vastly different careers upon returning to work. And others at the age of 65 or above report that they continue to work as self-employed (Sewdas et al., 2017).

At the same time in the United States, the unemployment rate is 3.6%, the lowest since December 1969 (BLS, 2019). With fewer available workers to employ, organizations are in a position where they must rely on artificial intelligence, outsourcing, part-time workers, and other solutions to staff open positions. What if there was another way? The environment of low unemployment provides a gap that organizations can fill with a growing population of mature workers. By employing proper training practices, organizations can capitalize on the growing number of workers over age 55, at a time when the availability of workers in general is low in the labor force (BLS, 2017).

The great, untapped potential of future success in our current labor climate is succession planning for mature workers. Knowledge is more than data or information that is explicit and easily shared with other individuals (Nonaka & Takeuchi, 1995; Davenport, DeLong & Beers, 1998). Knowledge requires a deeper understanding of how and why things are, the environment in which they exist, and all past tacit knowledge that may have bearing in the moment (Nonaka, 1998). Organizations will greatly benefit when they can reposition mature workers who already have the longevity and history within the firm to have a thorough understanding of

### ***Supporting Workforce Wisdom in a Global Economy***

all knowledge in need of transfer to other individuals. They would serve their employees and shareholders best if, instead of considering succession planning in the traditional sense, they re-framed succession planning to transition mature workers into transformed knowledge workers. The old succession planning model, where individual workers retire or leave, then someone new replaces them, will not be as successful in the future. This is a strategy that is no longer as impactful as it was in the past. Organizations have to transition to a knowledge economy, hire knowledge workers to create the knowledge infrastructure to support growth from within the firm to develop and train internally, so that workers may benefit from the experience of peers--regardless of age or generational labels. To refashion mature workers into knowledge workers, organizations have cultural and likely organizational issues to overcome.

Discrimination in current policies, generational differences, and stereotypes of workers may prevent movement of mature workers into a new role (Vasconcelos, 2015). First, HR policies, layoffs, and succession planning currently favor younger workers. Organizations must investigate current processes and policies to ensure there is no discrimination of either mature workers or of entry-level workers. Second, generational differences divide age groups. From Millennials to Baby Boomers, age groups have different needs and values. Balancing their communication styles (face-to-face versus digital) and work ethics will require a foundational understanding of how to improve work between all age groups. Third, organizations are faced with the issue of overcoming stigmas regarding the expectation that mature workers will “ride off into the sunset” as soon as they become eligible for retirement. Not only does this model suggest that mature workers continue to stay past retirement, it suggests that they enter into further development and transition into new roles to sustain the firm’s knowledge economy. This type of transition will require a shift in the culture of the company and the mindsets of all the individuals in the firm, including administrators and executive-level employees.

It is recommended that practitioners avoid ignoring individual differences and labeling employees simply as members of a specific generation, since these individual differences have a more impactful role in workplace behaviors than generational differences (Twenge, 2010). Instead of developing HR strategies that target specific generations, organizations may be better served by creating flexible HR practices to address the needs and values of all employees regardless of generational cohort group (Becton, Walker, & Jones, 2014). As Vasconcelos (2017) asserted, an organization’s main focus should be on retaining and motivating mature workers through incentives and training because mature workers demonstrate an authentic source of wisdom capital.

### ***Supporting Workforce Wisdom in a Global Economy***

Adapting to an aging workforce should not be seen solely as the responsibility of businesses and employers. In order to support individuals as well as thriving communities, a range of private and public entities must begin to offer assistance in training workers and emphasizing the importance of continuing education. Community colleges and universities must also play a crucial role in helping with training and development of mature workers, promoting the accessibility of lifelong learning at affordable prices or with financial incentives. For example, some universities currently offer free tuition for students who are ages 60 and older, which gives them the opportunity to gain new skills and also interact with students of varying ages and cultures, especially in online learning environments. Specific support is also needed in helping workers assess their options nearing retirement, weighing both the short- and long-term implications to their financial, physical, social, and emotional well-being. Government entities, educational entities, libraries, and career counselors must become more collaboratively proactive in raising awareness of the variety of resources they offer that can benefit mature workers. In addition, Sewdas et al. (2017) emphasized that further research needed to study how reforms to increase statutory retirement age could affect work participation. Governmental and legislative interventions should be thoroughly analyzed longitudinally to ensure they are reaching the intended outcomes of diversifying and enriching our workforce.

The knowledge and wisdom available in these mature workers is a resource for organizations to build institutional knowledge within the firm. When new technologies and ongoing change are a part of the corporate environment, the ability and speed at which an organization can transfer knowledge is a competitive advantage. Knowledge transfer is the ability of knowledge to pass from one individual and to be accepted by the next individual (Wathne, von Krogh & Roos, 1996). In a technology-driven business climate, the need for knowledge workers is high. Rather than a focus on traditional succession planning models, organizations can recognize the strengths of older employees and reposition them as knowledge workers.

### *Supporting Workforce Wisdom in a Global Economy*

## **FUTURE RESEARCH DIRECTIONS**

There are several research directions that can be pursued based on issues highlighted in this chapter:

1. How do we make the most of an aging workforce that remains in or is re-entering the workforce?

This research would provide insight into labor force barriers for either employees who are remaining or re-entering the workforce. This is a large and dynamic workforce, yet current and in-depth research on this group is lacking.

2. How can communities best support mature workers as they remain or re-enter the workforce?

Direct research into how communities can support mature workers is needed to immediately impact employees and employers. This includes questions surrounding where and how to provide services most effectively. The current level of awareness within the target group of these support resources should be assessed and methods for increasing that awareness explored. In addition, ways to increase successful collaboration between employers and community organizations in supporting the aging workforce need to be examined.

3. How are mature workers currently motivated, encouraged, and supported by their employers to pursue new ideas and processes?

Although employers, community stakeholders, and educational entities do play vital roles in the professional development of mature workers, no collaborative effort could be enough to take the place of an individual's personal choice to enhance their own skill set or change their mindset to become more knowledgeable about innovation, technology, and embracing diverse practices.

4. Is maturity relevant, if the individual is not also wise?

The terms mature and wise are not always synonymous; however, a person with wisdom does tend to be mature. Research has provided evidence that there is no standard correlation between chronological age and wisdom.

### *Supporting Workforce Wisdom in a Global Economy*

#### 5. Can a model or framework for “unlearning” be constructed?

Literature synthesis and model building need to be conducted in this important area of research. The authors propose that unlearning will be done as often as learning in the next two decades. This is an understudied area of research.

#### 6. What is the place of wisdom in the DIKW model?

Research on the model itself is extensive with many variations that reference wisdom as the pentacle. Directed research is needed to better understand the nature of wisdom as a part of the model in the field of information science.

#### 7. What is the pathway to wisdom?

Wisdom is manifested in the world through particular people recognized as rare “golden nuggets.” Investigation is needed into the circumstances, training, and experiences that cause these people to be labeled as wise by family, friends, and colleagues.

## **CONCLUSION**

As the Baby Boomers continue to evolve into seasoned senior citizens and elders of the current labor force, it is essential that employers and training managers make conscious efforts to ensure that workers of this generation still receive equitable professional development opportunities and support. While a common practice within many organizations has been to offer early retirement to easily remove mature employees from the workforce and hire younger entry-level employees, organizational leaders must remain mindful of the crucial role that having the experience and wisdom of these mature workers adds to the culture and diversity of their work environment.

Although governmental, community, corporate, and educational entities all play significant roles in the workforce development process and training of mature workers, it is ultimately the responsibility of individual workers to ensure they are lifelong learners with relevant skill sets and the will to evolve. However, equitable resources, supportive practices and steadfast encouragement provided by those in charge of professional development experiences are crucial factors contributing to the success of this model.

Wise, mature workers are unique golden nuggets found within an organization. The characteristics of wisdom they exhibit can be bolstered to enhance a corporate workforce in this dynamic and changing knowledge economy. Employers must

### ***Supporting Workforce Wisdom in a Global Economy***

continue to create and maintain inclusive work climates and contexts that welcome the perspectives of all generations, at the same time avoiding the notion that offering early retirement is the most effective practice for cultivating change. Adapting to an aging workforce is inevitably the responsibility of all stakeholders of our entire society; we must individually commit to collectively develop positive working relationships with colleagues of all generations in pursuit of efficient communication and a more skillful, technology-competent labor force, filled with workforce wisdom.

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## **KEY TERMS AND DEFINITIONS**

**21st Century Skills:** Core competencies including skills such as collaboration, digital literacy, critical thinking, and problem-solving that educational and corporate advocates believe schools should teach to help students thrive in today's technologically advanced world.

**Knowledge Economy:** Uses knowledge-centered business models and practices to create products and services for consumers.

**Labor Force:** The collective population of individuals who currently work or are able to work.

*Supporting Workforce Wisdom in a Global Economy*

**Unlearning:** The process of confronting contradiction to understanding previously accepted data, information, and knowledge to objectively assess and utilize alternative mental models or paradigms.

**Wisdom:** A uniquely human quality demonstrated through an ability to apply introspection, experience, and sound judgment in conjunction with available data, information, and knowledge to create a course of action leading to beneficial and productive decisions for both individuals and society.

**Workforce Development:** An economic development strategy that focuses on the collaborative efforts of corporate, community, government, and educational entities to help effectively train and prepare current and future skillful employees through practical approaches.