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The New World Of Work And Digital Learning: Millennials And Generation Z

Malek Bakheet Elayan

Institute of Public Administration, Business Administration Department, Saudi Arabia.

Abstract. In the modern business environment, there is an evident mismatch of the skills possessed by individuals and those businesses are sourcing. Despite business leaders ensuring automation, digitisation and extraction of value of data (for example by artificial intelligence) are core organisational priorities, the workforce should still be in a position to complement the value of technology. The rising popularity of technology has impacted the manner in which knowledge is acquired. This is particularly important for the Millennials and Generation Z who are currently transitioning to the new world of work and largely acquiring knowledge through the internet. However, the COVID-19 pandemic has upset the balance of this new world of work, involving business, digital technologies and new ways of working. The solution to a successful transition by Millennials and Generation Z requires embracing technology and upgrading training programmes.

Therefore, this paper has identified the best practice in using digital learning to harness the transition to the new world of work. Also, this paper has evaluated on the ways in which the markets evolve or change over time. It has been pointed out that their implications would include varying employment markets, changing demands and supplies for skills, and demographic trends (Millennials and Generation Z.) The current COVID-19 pandemic has been noted to have an impact on the labour markets today and in future.

Key Words: New World of Work; Digital Learning; Millennials, Generation Z, COVID-19

1. Introduction

The current COVID-19 pandemic has significantly shifted the view of work and skills for people of all ages. This is evidenced by a report (WEF, 2019) which notes that emerging technologies would generate some 133 million new jobs by the end of 2022, with 75 million being displaced. Even before the emergence of COVID-19 and recognition of the need for a new world of work, a global skills gap was evident, an indicator that most of these jobs would remain unfilled. Another report (Pearson, 2020) targeting more than 7,000 learners showed that COVID-19 represented a

major demand for changing learning strategies, with online learning and the demand for digital skills being critical . In the workplace, the different generations have distinct behavioural characteristics which correspondingly influence their unique benefits to their organisations. Currently, the majority of employees are the Millennials, with Generation Z also including a considerable percentage of the workforce from 2013 (Szymkowiak et al., 2021). This generation exists in the modern workforce amidst technological development and transition. This prompts the need for improving work and the nature of employment. One of these approaches is adoption of digital learning, which readily offers accessible and low-cost learning at a scale encouraged by immense forces. For instance, Rickard and Brown (2021) observed that in the best practice for mitigating the current challenges in the new world of work, technological advances are instrumental, acting as a channel for upskilling and reskilling Millennials and Generation Z. This is in the context of rapidly changing business models, digitalisation and automation.

Transition to the new world of work evidenced by shifts in work and expectations, economic recessions, and technological advances has significant implications for workers. For instance, most of the Millennials, the majority of past generations who have joined the workforce, have been struggling with transition into and out of their entry-level work. Importantly, O'Boyle et al. (2017) indicate that approximately 5.6 million US-based Millennials who were holding a job in 2000 did not have a job in 2010. Further, Buckley (2015) noted that this generation was significantly affected in the 2007-09 recession with an unemployment rate of approximately 13.4%. Hence, the shifts in the modern workplace represent distinct challenges and opportunities for all stakeholders. According to Djankov and Saliola (2019), these structural shifts require organisations and governments to work collaboratively. Digital learning should expand beyond simplified technical knowhow or STEM (Science, Technology, Engineering and Mathematics) and integrate skills meant for complex problem solving, critical and creative thinking, social skills and strong capabilities for continuous learning.

2. New World of Work and Digital Learning

2.1 New World of Work and How It Evolve Over Time

According to CIPD (2020), the trends that shape modern economies, societies, and world of work have a direct implication on HR profession regarding who is included, what it does, and how it does it. In this case, the HR managers must ensure that they are monitoring labour market state and addressing potential economic developments. The changing world of work trends is as shown in figure 1;

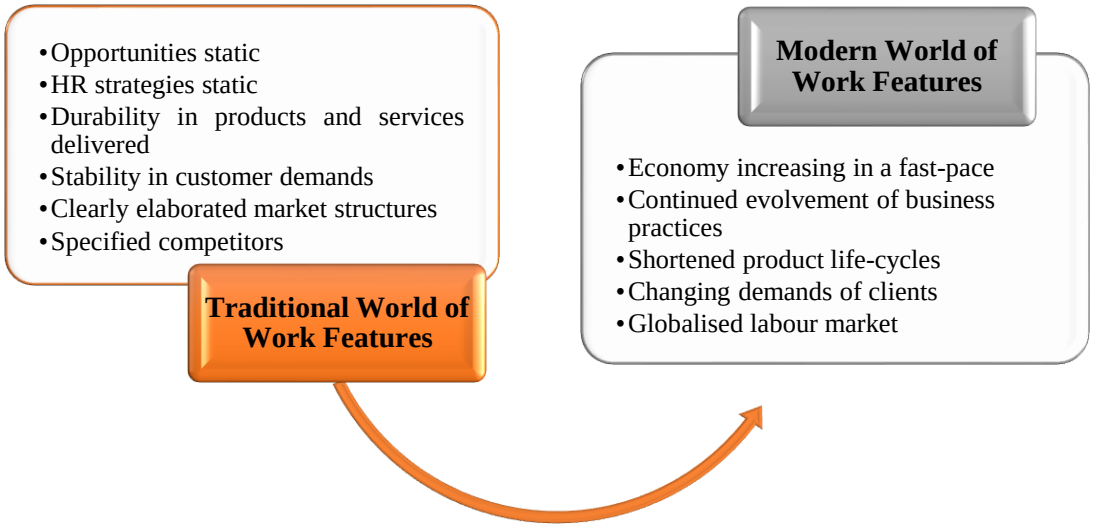

Figure 1: Comparison of Traditional and Modern World of Work

In a study by the World Economic Forum (2016), the employment markets are evolving in four main areas reshaping the world of work. These include demographic change, more excellent individual choice, ongoing technological revolution, and increased client sophistication. A summary of how these factors lead to employment markets varying and changing demands and supplies for skills is as shown in figure 2;

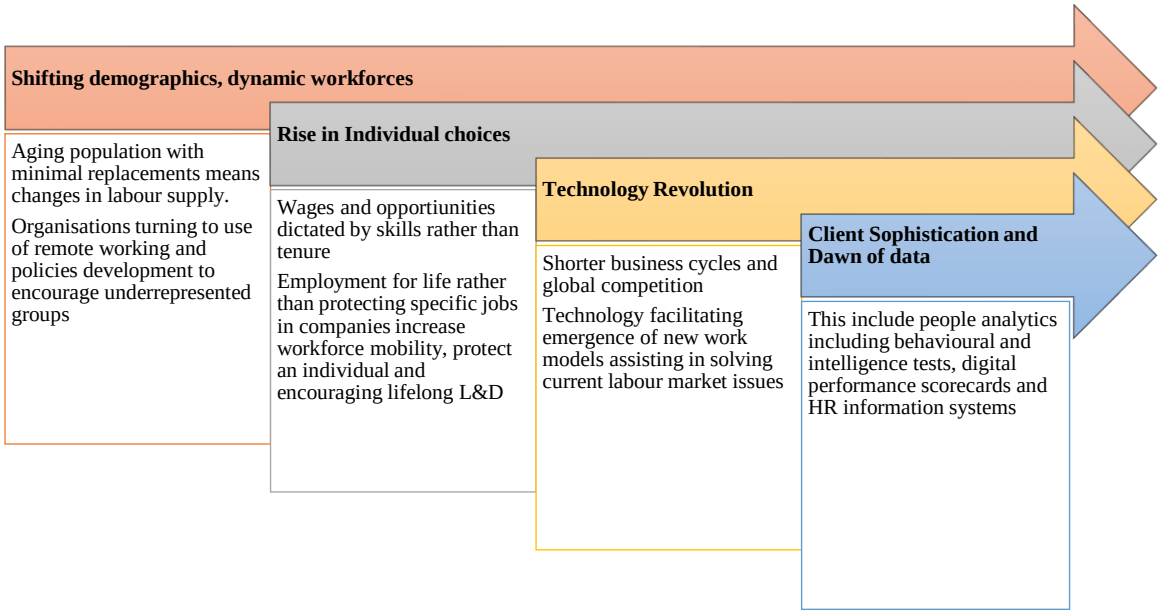

Figure 2: Markets evolving over time
Source: Summarized from World Economic Forum (2016)

2.2 Digital learning

This is identified in the literature as a complex scenario associated with multiple distinct interpretations. A basic definition (Kyndt et al., 2009) identified it as an unplanned and implicit process with unpredictable outcomes, with the use of different types of technological device such as smartphones, tablets and computers. This is supported by a study (Rickard & Brown, 2021) which noted that digital learning is characterised by many different supporting technologies, with continual development expanding the delivery options. These technologies include virtual learning (webinars, online classrooms and chat tools), online learning communities/social networks and collaboration, smartphone technology/mobile applications, video and audio content, learning management systems and learning experience platforms, curated content through social bookmarking and online courses/resource platforms. Hence, it can be argued that digital learning is an individual development interacting with the rest. Sousa and Rocha (2019) noted that digital learning is implemented in a spontaneous and unconscious manner with no prior set objectives for learning outcomes. Nevertheless, its effectiveness is evident in how it elicits the likelihood of preparing learners to think critically and solve complex problems, with collaborative work, efficient communication and autonomous independent learning processes. Conversely, by focusing on Generation Z and Millennials, Tick (2018) evidenced that digital learning can be done in a planned approach by creation of particular courses linked to the activities and procedures executed by employees. Hence, there exist learning activities appropriately planned and defined but normally integrated with spontaneous learning strategies. These include but are not limited to searching for information and watching complementary videos. The intention of this is improved understanding of issues in the course or acquisition of more knowledge in this area.

Digital Transformation

Immense changes are currently shaping the world of work, including digitisation and the gig economy . Dabić et al. (2021) note that photography, videography, wearables and eye tracking are becoming increasingly accessible, guiding data analysis in new and distinct dimensions. The rise of self-driving vehicles, drones, virtual assistance technologies, software for translation and robotic surgeries have significantly transformed the world of work. This digital transformation has contributed to immense challenges prompting organisations to invest in approaches for coping. These include new and emerging customer segments, cultural diversity in the global marketplace, market volatility, increased client expectations on the quality of products and services, and implications for the internet on core business (Potocka-Sionek & Aloisi, 2021). In the job market, for instance, there are higher-level positions in management and professional occupations which demand increased flexibility and problem-solving skills. It is projected that by 2020 in approximately 50% of organisations automation will contribute to a reduction in the size of the full-time workforce with more than half of all employees required to undergo significant re- and upskilling (Wightman, 2020). This is as a result of artificial intelligence, robotics, and nanotechnologies. However, not all the jobs are being replaced by the rising technologies, but are undergoing a rapid transformation. Apart from the evident organisational changes due to the digital

transformation, individuals are also faced by change. The old skills are becoming obsolete, with new ones being demanded (Mattila et al., 2021). Also, there is evidence that investment assists in the retention of skills and gaining a high-level competitive advantage.

Therefore, the complexities and uncertainties occasioned by globalisation and the accelerating rhythm of technology change must be balanced by human resources with relevant skills for assisting organisations handle digital transformation.

Trends in Skills Development

Although skills were historically used to identify individual features, now they are additionally defined with two distinct dimensions: individualised and collective (organisational) (Mettallo et al., 2018). Despite this concept attracting interest among different authors (Jagannathan et al., 2019; Dubé & Wen, 2021;) Mrozova & Demchenko, 2021) it is still a research issue in the higher education dominion as it represents the core goal to be achieved by learners. Skills development is identified as a strategic management tool for coping up with the current business environment, specifically since the market has changed from mass production to customisation of quality, price issues, and speed of delivery with new configurations in the industry. These changes have created new demand for developing innovative large-scale upskilling, reskilling and redeployment strategies. Organisations are presented with opportunities for transformation, as upskilling and reskilling at a higher levels contribute to improvement of economic dynamism of business operations, while creating an ecosystem for ensuring all employees are employable and productive (Wightman, 2020).

To meet these challenges, organisations have been working to establish a strategy for life-long skills development. At the start of the learning process, this means equipping young individuals with appropriate knowledge, skills and attitudes essential for the emerging opportunities in life and work. Adult learning would be instrumental in assisting existing employees to acquire skills essential for digitally enabled workplaces. This is possible through application of the 70-20-10 Model, which is identified as learning with others and practical on-the-job experience. It is a transformative learning theory, and experiential learning enables adults to learn through reflection, peer dialogue and application.

2.3 Millennials and Generation Z Transition

Over the years, different generations have taken the lead in discussions with employers. Management must appreciate the values and contributions of all the generations when recruiting and retaining potential employees (Italia, 2020). Millennials, for instance, account for approximately 82 million individuals born between 1980 and 1994. This is opposed to Generation Z, which is first initial generation raised from birth in the era of smartphones and other technologies. This generation has an advantage in joining the contemporary workforce as they are more ready to embrace innovation. For example, Zoya and Chitrao (2021) note that the millennials put immense effort into teamwork, with Generation Z being increasingly independent although

both generations appreciate positive feedback in their workplace. The transition of both Millennials and Generation Z to the new world of work represents a major challenge.

Different authors have concluded that Millennials and Generation Z have similar features ; Baharudin et al., 2017; Maioli, 2016), given their interest in technology and job flexibility. It is clear that Generation Z, like the Millennials, prefer technology and hence adopt it in both their working environment and their lifestyle. Given these similarities, the fact that 75% of the global workforce comprises Millennials and Generation Z is critical for organisations adopting their engagement strategy in a manner which is consistent with how the generations communicate and engage in their work (Sinead, 2018).

2.3.1 Flexible Workplace

For Generation Z and Millennials, a common strategy adopted in transition to the new world of work is through remote working. A recent study (Gilchrist, 2019) showed that three-quarters (74%) of the Millennial and Generation Z managers have members of their teams working remotely, as opposed to 58% of Baby Boomers. It is expected that by 2028, 73% of entire teams will include remote workers, providing evidence of the demand for flexibility from the Millennials and Generation Z in their contributions to the contingent workforce. Hence, to attract and retain Millennials and Generation Z employees, employers must provide significant financial rewards and a flexible workplace culture. These findings are affirmed by a study (Racolţa-Paina & Irini, 2021) on human resource professionals, which noted that 80% of both Millennials and Generation Z are more likely to stay longer in organisations which offer flexibility. This growing trend has been specifically strengthened by the COVID-19 pandemic, which has created a new normal of working. In fact there is evidence that 46% of all Generation Z individuals are free-lances, with the numbers forecast to consistently grow (Racolţa-Paina & Irini, 2021).

2.3.2 Gig Economy

A majority of Millennials and Generation Z are involved in the gig economy, where there is a trend for job opportunities to be structured in small projects relying on online platform or applications (Willmott, 2016); a popular choice for these cohorts. The Millennials and Generation Z are encouraged to invest in opportunities for increasing their breadth of experience and interest in their operations. This includes the need to access online knowledge, with the Millennials and Generation Z being viewed as lacking patience and sourcing for new opportunities promptly (Seemiller & Grace, 2017). These authors recommended the need for employees to acquire unique experiences and skills, allowing them to make critical contributions in navigating the new post-COVID-19 world. The response of different generations to the pandemic would enable inter-generational innovations and optimisation today and in the future. The organisational leaders focusing on achieving high-quality work from an alternative workforce could be appropriately positioned in recruiting contract workers based on fair market pay.

2.3.3 Diversity of Expertise

Unlike past generations who spent years in perfecting specific skills, Millennials and Generation Z have been focusing on sourcing a variety of professional experience, matching their interests and supporting change throughout their entire professional lives. According to Rzemieniak and Wawer (2021), this is particularly important among employees as it gives them an advantage and an area of interest on an equal basis. Their engagement would offer appropriate opportunity of access to people with greater flexibility, enabling them to take part in the variety of tasks required in the new world of work. These features fit the gig economy and include short-term, specialist projects implemented by an on-demand workforce. In a different context, (Generation Z and the Environment ... 2021) the process id identified as influencing how an intense level of specialism could be readily available from more all-around employees. All the employees must be able to embrace new skills and as such be successful in the new world of work.

2.4 Role of Digital Learning in Enabling Transition

Given the evident demand for new skills for the Millennials and Generation Z, digital learning will play a critical role in their transition. One study noted that reskilling and upskilling of employees by embracing virtual and digital learning platforms is now a reality and the norm (Nachmias & Hubschmid-Vierheilig, 2021). In the face of uncertainty, organisations would be advised to blend learning in a more flexible learning experience. As an example of global best practice, Blayone (2018) noted that organisations are adopting digital learning to increase team collaboration working remotely or in distinct time zones. The best practice includes undertaking courses collaboratively in virtual formats, including videoconferencing and instant messaging. 77% of senior-level executives agree with the view that an organisation would gain from its staff's adaptable and flexible mindset in post-COVID era. This is particularly the case since education systems have failed to keep pace with the changing nature of work, leading to many employees being unable to access the needed skills; 40% of employers lack skills in their entry-level job opportunities. There are evident gaps in the technical skills including STEM subjects and soft skills, including communication, teamwork strategies and punctuality. This was affirmed thirty years ago by Manyika (1992), who noted that 37% of all respondents in the modern job environment did not holistically utilise the skills or rise to sufficient challenges.

The digital revolution has particularly influenced Millennials and Generation Z learning approaches, This includes Generation Z who are smartphone natives and are savvy with mobile and Web 3.0 technologies, including artificial intelligence software (Yu & Suny, 2020). This is gained through unlimited access to a broad range of information through multiple channels, particularly the digital platforms, making the most of opportunities by creating and distributing messages in a digital manner, instantaneously and collaboratively. Organisations also diversify course delivery platforms, such as full online platforms, blended learning and face-to-face courses. The website Digital Learning and Gen Z (2018) notes that 52% of Generation Z and Millennials normally adopt social media platforms, websites including YouTube, and online research tools. These are appropriate self-educating tools, used with the high level of independence critical for the modern world of business.

2.5 Conclusion, Implications and Directions for Future Research

In conclusion, this paper has identified the best practice in using digital learning to harness the transition to the new world of work. With advances in current technology and prevalence of the COVID-19 pandemic, employees' skills mismatch has increased. There has been significant success in using learning technologies, particularly in response to the pandemic, strengthening the culture of digital learning and creating an effective learning environment. This is particularly the case among the Millennials and Generation Z. Failure in a successful transition to the new world of work will contribute to labour market opportunities among the high- and low-skilled jobs, unemployment and underemployment, stagnating incomes and inequality. Increased digitisation in the modern business environment is dependent on technological innovations and the uptake of the new technologies. This report has encountered immense risks demanding the automation of job functions, while many people encounter changes in their roles and the required skills. As a consequence, employees must succeed in the modernised digitally enabled work environment, also posing immense challenges for policy makers and business leaders. There are immense opportunities for organisations which offer timely feedback, harness learning to meet future labour market needs, and customise learners' needs. The disruptions caused by COVID-19 and the increased use of technology will be a positive contribution to improving learning. Organisations must harness the overall resilience and efficiency of work practices to assist employees to successfully transition to the new world of work.

Despite various studies which have evaluated how digital learning can be used to promote transition to the new world of work, there is still insufficient research in this area. This is particularly the case while COVID-19 is an ongoing problem. Knowledge in this area continues to be characterised by constant change and hence new approaches to learning need to be considered. As the best future strategy, researchers should prioritise obtaining the knowledge to support appropriate management strategies for learning. Particularly, additional research is required which focuses on the Millennials and Generation Z.

References

Baharudin, N. S., Salleh, M. S. M., & Mahbob, N. N. (2017). Overview of " Generation Z " Behavioural Characteristics and Its Effect Towards Hostel Facility. In International Journal of Real Estate Studies (Vol. 11, Issue 2).

Blayone, T. (2018). Reexamining digital-learning readiness in higher education: Positioning digital competencies as key factors and a profile application as a readiness tool. International Journal on E-Learning: Corporate, Government, Healthcare, and Higher Education, 17(4), 425–451.

CIPD (2020). Workforce trends. Online available at<

https://www.cipd.co.uk/knowledge/work/trends> Retrieved on 29/4/2020

Dabić, M., Marzi, G., Vlačić, B., Daim, T. U., & Vanhaverbeke, W. (2021). 40 years of excellence:

An overview of Technovation and a roadmap for future research. In Technovation (Vol. 106). https://doi.org/10.1016/j.technovation.2021.102303

Digital Learning and Gen Z. (2018).

Djankov, S., & Saliola, F. (2019). Preparing for the Changing Nature of Work in the Digital Era. OECD Going Digital Policy Note, March. https://doi.org/10.1787/888933930573

Dubé, A. K., & Wen, R. (2021). Identification and evaluation of technology trends in K-12 education from 2011 to 2021. Education and Information Technologies. https://doi.org/10.1007/s10639-021-10689-8

Generation Z and the environment - how can we use their passion to attract them into food and fibre sector careers? : Rural Leaders. (2021). https://ruralleaders.co.nz/generation-z-and-the-environment-how-can-we-use-their-passion-to-attract-them-into-food-and-fibre-sector-careers/

Gilchrist, K. (2019). How Millennials and Gen Z are reshaping the future of the workforce. Cnbc. https://www.cnbc.com/2019/03/05/how-millennials-and-gen-z-are-reshaping-the-future-of-the-workforce.html

Italia, L. (2020). Values in the Workforce: Millennials and Generation Z. Honors Projects in Management, May. https://digitalcommons.bryant.edu/honors_management/31

Jagannathan, S., Ra, S., & Maclean, R. (2019). Dominant recent trends impacting on jobs and labor markets - An Overview. International Journal of Training Research, 17(sup1), 1–11. https://doi.org/10.1080/14480220.2019.1641292

Kyndt, E., Dochy, F., Michielsen, M., & Moeyaert, B. (2009). Employee retention: Organisational and personal perspectives. Vocations and Learning, 2(3), 195–215. https://doi.org/10.1007/s12186-009-9024-7

Maioli, D. E. (2016). New Generations and Employment – An Exploratory Study about Tensions Between the Psycho-social Characteristics of the Generation Z and Expectations and Actions of Organizational Structures Related with Employment (CABA, 2016). Journal of Business, 2(1), 01. https://doi.org/10.18533/job.v2i1.53

Manyika, J. (1992). Technology and the future of work. Choice Reviews Online, 30(03), 30-1603-30–1603. https://doi.org/10.5860/choice.30-1603

Mattila, M., Yrjölä, M., & Hautamäki, P. (2021). Digital transformation of business-to-business sales: what needs to be unlearned? Journal of Personal Selling and Sales Management. https://doi.org/10.1080/08853134.2021.1916396

Metallo, C., Agrifoglio, R., Schiavone, F., & Mueller, J. (2018). Understanding business model in the Internet of Things industry. Technological Forecasting and Social Change, 136, 298–306. https://doi.org/10.1016/j.techfore.2018.01.020

Mrozova, Y., & Demchenko, V. (2021). Modern trends in teaching with the use of information

technology. E3S Web of Conferences. https://doi.org/10.1051/e3sconf/202127312127

Nachmias, S., & Hubschmid-Vierheilig, E. (2021). We need to learn how to love digital learning 'again': European SMEs response to COVID-19 digital learning needs. In Human Resource Development International (Vol. 24, Issue 2, pp. 123–132). https://doi.org/10.1080/13678868.2021.1893503

O'Boyle, C., Atack, J., & Monahan, D. K. (2017). Generation Z Enters the Workforce. Deloitte. https://www2.deloitte.com/content/dam/insights/us/articles/4055_FoW-GenZ-entry-level-work/4055_FoW-GenZ-entry-level-work.pdf

Patricia Buckley. (2015). Understanding Millennials and generational differences | Deloitte Insights. https://www2.deloitte.com/insights/us/en/economy/issues-by-the-numbers/understanding-millennials-generational-differences.html

Pearson. (2020). The Global Learner Survey Infographic. https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/news/gls/Pearson_GLS_2020_Infographic_FINAL.pdf

Potocka-Sionek, N., & Aloisi, A. (2021). 'Festina Lente': The ILO and EU Agendas on the Digital Transformation of Work. International Journal of Comparative Labour Law and Industrial Relations. https://doi.org/10.2139/ssrn.3694754

Racolţa-Paina, N. D., & Irini, R. D. (2021). Generation z in the workplace through the lenses of human resource professionals – a qualitative study. Quality - Access to Success, 22(183), 78–85.

Rickard, C., & Brown, D. (2021). DIGITAL LEARNING IN A POST-COVID-19 ECONOMY Digital learning in a post-COVID-19 economy: a literature review Contents.

Rzemieniak, M., & Wawer, M. (2021). Employer branding in the context of the company's sustainable development strategy from the perspective of gender diversity of generation Z. Sustainability (Switzerland), 13(2), 1–25. https://doi.org/10.3390/su13020828

Seemiller, C., & Grace, M. (2017). Generation Z: Educating and Engaging the Next Generation of Students. About Campus: Enriching the Student Learning Experience, 22(3), 21–26. https://doi.org/10.1002/abc.21293

Sinead. (2018). Millennials and Generation Z- The New World of Work. Capital Global Employment Solutions. https://www.capital-ges.com/millennials-and-generation-z-the-new-world-of-work/

Sousa, M. J., & Rocha, Á. (2019). Digital learning: Developing skills for digital transformation of organizations. Future Generation Computer Systems, 91, 327–334. https://doi.org/10.1016/j.future.2018.08.048

Szymkowiak, A., Melović, B., Dabić, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the internet, and technology in the education of

young people. Technology in Society, 65. https://doi.org/10.1016/j.techsoc.2021.101565

Tick, A. (2018). Research on the Digital Learning and E-learning Behaviour and Habits of the Early Z Generation. INES 2018 - IEEE 22nd International Conference on Intelligent Engineering Systems, Proceedings, 000033–000038. https://doi.org/10.1109/INES.2018.8523906

WEF. (2019). Future of Construction | World Economic Forum. World Economic Forum. https://www.weforum.org/projects/future-of-construction

Wiastuti, R. D., Lestari, N. S., Mulyadi, N. B., & Masatip, A. (2020). The generation z characteristics and hotel choices. African Journal of Hospitality, Tourism and Leisure, 9(1), 1–14.

Wightman, B. (2020). Why we need a reskilling revolution | World Economic Forum. World Econonmic Forum. https://www.weforum.org/agenda/2020/01/hundreds-of-millions-of-workers-need-reskilling-where-do-we-start

Willmott, B. (2016). The Growing Gig Economy. Inc. http://ezproxy.uniandes.edu.co:8080/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=fth&AN=112144960&lang=es&site=eds-live&scope=site

World Economic Forum (2016). Four changes shaping the labour market. Online available at< https://www.weforum.org/agenda/2016/01/four-changes-shaping-the-labour-market/> Retrieved on 19/3/2020

Yu, E., & Suny, C. (2020). Student-inspired optimal design of online learning for generation Z. Journal of Educators Online, 17(1).

Zoya, A., & Chitrao, P. V. (2021). Workplace Preference of Generation Z : A Review and Research Agenda. Psychology and Education Journal, 58(2), 10163–10167. https://doi.org/10.17762/PAE.V58I2.3987