

The Demographic and Occupational Factors 'Influence over the Development Accessed Solutions

Adela JANSEN

Bucharest University of Economic Studies, Bucharest, Romania

office@adelajansen.com

Abstract. *The study aims to reveal the Romanian employees and entrepreneurs' development preferences in their current work environment, for both professional and personal skills, in terms of content and delivery method. Based on lack of relevant quantitative analysis for the outcome expected, a study was performed using an online survey, conducted in October 2024, collecting a total of 918 valid responses. The study sample consisted in individuals aged 19-55, currently employed in Romania, with at least one year of work experience. The results show that respondents benefited occasionally from development solutions, the frequency being associated with the current occupation, favorable for office roles and managerial position, rather than physical roles. An additional positive association is made with a higher level of completed studies, personal income and size of the company they work for. Classroom training remains popular, and AI-based is preferred by younger generations, while a third of the respondents use only one development option. The residents of larger cities and middle to top managers prefer collaborative tools and learning journeys, and Gen Z prefers learning by observation, contrary to more senior employees. No association was found either between frequency and gender, residential environment, generation, or career stage, nor between type of professional development solution and gender. The study contributes to a better understanding of development solutions and their frequency usage, and the demographic and occupational factors association, for better upskilling and re-skilling programs, and thus a more efficient use of training time and budgets in an exponential changing environment.*

Keywords: development, demographic factors, occupational factors.

Introduction

In times of exponential global transformation due to geopolitical and economic turmoil, to the rise of Artificial Intelligence's impact equally on business and personal environment, in a tense labor market and talent scarcity in an aging society, continuous learning and development solutions become a necessity, a cornerstone for companies and individuals. A significant growth was observed for e-learning, becoming a necessary component of the training provisions in organizations, impacted by individual learning appetite and work productivity, influenced by situational barriers and enablers (Garavan T.N. et al., 2010), including personal or organizations' available resources.

However, the personal, companies' or industries' competitive advantage remains a priority at business and country level. Thus, understanding how these parameters influence employees' approach and commitment to learning openings is crucial for creating a more inclusive and effective workforce.

The generational diversity in the labor market, but also for development opportunities, may uncover potential differences when career stages are considered, in quantitative of incidence terms, content or ways of delivery. For example, the youngsters may benefit more from mentorship programs, while the earlier generations are inclined to upskill in emerging technology programs, to maintain their professional relevance. Therefore, the differences awareness may bring positive impacts on decision-making process for distinct need and expectations of the workforce.

The residential environment is also a center of interest as the urban opportunities are much higher than the rural ones, leaving space for scarcity ratios to remain high (World Bank, 2023). The increasing number of remote learning platforms, financially supported by companies, interested in the educated workforce availability and community engagement as well, open the access to high-level development, regardless of the location.

The increasing association between the level of competences and skills acquired through diverse forms of education, with the employability in the labor market and the remuneration levels, increases the interest in development programs participation and encouraged their diversification. The post-pandemic willingness for technical and business topics, as well as the care for wellbeing and burnout avoidance, represent the foundation of a number of skills programs, whether offered with companies' support, or free available online resources.

The companies' size and field of activity represents parameters of resources availability, as not all the industries are homogenously impacted by the multiple crisis since pandemic, such as the ongoing military conflicts or legislative and fiscal lack of predictability. Nevertheless, larger companies may afford more comprehensive and inclusive development programs than smaller companies or entrepreneurs, which rely on less expensive learning resources, although equally interested in training their personnel, aiming to increase attraction and retaining of talents.

Therefore, a thorough study of demographic and occupational factors influences on development solutions that we have in the current era, of hybrid formats, data-driven understandings, of customized learning pathways, may offer valuable insights for companies, regulators, and individuals as well. They may guide their efforts to foster the challenging times fears and aspirations for personal and organizational success.

Research question

How do demographic and occupational factors (i.e., gender, residential environment, generation, career stage, highest completed studies, individual monthly income, current company size, and main field of activity) relate to the frequency and type of professional development solutions accessed by employees at their current workplace?

Literature review

Business and social environment ongoing changes

The uncommon era started after pandemic, a black swan event (Taleb N., 2007), dramatically changed the learning and development industry, being influenced and used in different ways by diverse generations active or inactive in the labor market, which have various accumulated experiences, motivations or digital literacy.

Traditional training done face-to-face dramatically changes when technological integration transformed the landscape (Folabit, N. L. & Jita, L. C., 2024), offering new modalities of learning, affecting the people's motivation and freedom of choice. Numerous studies have been done on distinct types of population, whether in academic or business environments, to support a quicker adaptation process and offer a better use of available resources.

The personalized instruction preference (Grant & Basye, 2014; Means et al., 2013) represent an increasing topic of interest for decision-makers, as before pandemic, intended e-learning had rather low rates of participation (Levy, 2007), with high dropout rates (Flood, 2002), the e-learning being a rare development modality (DeRouin *et al.*, 2004). Lately, the development

solution evolved, leading to more innovative approaches, overlapping with the traditional ways (Andrews Graham, 2019).

The rise of the digital natives (Henne et al., 2024), raises the bar of their peers to adapt more quickly to the new realities, regardless of the generations, facilitating expected tailored learning experiences (Vysochan et al., 2024). Equally important, are the multiple leadership tensions since 2020 (Jordan J., Wade M. and Teracine E., 2020), that induced more development needs and expectations at the managerial levels, to face increasing professional and personal challenges, in an exponential transformation in society and business environment, while being responsible not only for their own careers, but also for their teams.

Constat learning needs and expectations.

Long-life learning has never been more a striking priority for employees, freelancers, or inactive employees, not only in large-size companies having available resources and impacting the economy and labor market as well, but also in small- to medium- sized enterprises (SMEs). The SMEs in particular, started to actively promote and support educational opportunities in the last decade for their employees, that changed versus the formal education focused on job-specific themes, or on inhouse training before (Ahlgren, L. and Engel, L.C., 2011).

Work-integrated learning (Jackson D, 2024) is crucial for employability in the labor market, requesting personal involvement and desire to evolve, and potential occasions to exercise it. The “opportunity to learn”, first evoked by Carroll (1963) and Husén (1967), evolved into an concept describing a large assortment of settings, resources, structures, and processes (Perry L.B. et al., 2024), lodging a large range of learning and development opportunities, synergies that all the involved stakeholders may benefit.

Literature gap

There are academic quantitative studies conducted for better understanding of organizations’ training solutions and programs’ connection with demographic factors, such as Garavan T.N. et al., 2010). Adding the occupational factors in the same research, to the best of our knowledge, there is no complex research aiming to connect the frequency and type of professional development solutions accessed by employees at their current workplace as well, especially in the post-pandemic era.

Methodology

A quantitative analysis was performed using survey data. The online survey, conducted in Romania in October 2024, collected a total of 918 valid responses (see Table 1). The study sample consists of individuals aged 19-55, currently employed in Romania, with at least one year of work experience. The median age of the respondents is 42.

The survey consists of eleven categorical questions, out of which nine assess demographic and occupational factors (i.e., gender, residential environment, current occupation, generation, career stage, highest completed studies, individual monthly income, current company size, and main field of activity), and two assess the frequency and type of professional development solutions accessed by employees at their current workplace. The sampling method used was convenience sampling

The respondents are gender equilibrated, slightly favoring the women (57.2%). Half of the total respondents come from large cities (54.8%) with above 100.000 inhabitants. 49.3% of the

respondents have an office role being more susceptible to accessing a development program, followed by physical role employees (27.2%), that may be submitted to a future replacement due to automatization or digitalization.

92.7% of the people are Gen X or Millennials, as they are the majority also in the labor market, in fair equal proportion represented (45.5% and 47.2%), with an additional input of 7.3% from Gen Z respondents. The categories (“early,” “mid,” “blossom,” “late”) reflect the elapsed time since first employment, regardless of actual working periods (the survey does not account for interruptions or gaps in work history). The persons’ seniority up to 20 years and above is captured likewise in the sample (47.4% below 20 years and 52.6% above).

64.1% of survey questions have Bachelor degree and above, that are more inclined to consider the development subject being relevant, with a high-school level for 22.5% of the person questioned. The revenues level is concentrated between 2.001 lei and 8.000 lei (69.5%), followed by 6.000 lei to 8.000 lei for 15.5% of respondents’ earnings.

The current company size is an important parameter as it is correlated with the accessibility and willingness of the organization to support the employees’ progress works (Iman M.Y., et al., 2020). Thus, a comparable size of the sample is split between considered ranges, varying from 15.1% to 25.2% for companies with one thousand employees or more.

Table 1. Sample characteristics

Variable		Percent
Gender	Man	42.8
	Woman	57.2
Residential environment	Capital	15.1
	Very large town (over 250,000 inhabitants)	20.9
	Large town (100,001 - 250,000 inhabitants)	18.8
	Medium town (50,001 - 100,000 inhabitants)	12.6
	Small town (10,000 - 50,000 inhabitants)	11.0
	Very small town (less than 10,000 inhabitants)	4.0
	Village / Commune	17.4
Current occupation	Employee in a physical role (production worker, courier, field technician, security guard etc.)	27.2
	Employee in an office role (programmer, accountant, administrative assistant, call center operator etc.)	49.3
	Lower Manager (coordinator, supervisor)	7.8
	Middle Manager (project manager, department director etc.)	7.6
	Top Manager (general director, operations director, financial director etc.)	2.1
	Entrepreneur	5.9
Generation	Gen X (44-55 y.o. incl.)	45.5
	Millennials (28-43 y.o. incl.)	47.2
	Gen Z (19-27 y.o. incl.)	7.3
Career stage	Early (1-9 years)	18.1
	Mid (10-19 years)	29.3
	Blossom (20-29 years)	37.6
	Late (30-37 years)	15.0
Highest completed studies	School	.8
	Vocational school	4.5
	High school	22.5
	Post-secondary school	8.2

Variable		Percent
	Bachelor	39.0
	Master	23.5
	MBA / Executive MBA	.7
	Doctorate	.9
Individual monthly income	Up to 2000 lei	1.7
	2001 - 4000 lei	33.6
	4001 - 6000 lei	35.9
	6001 - 8000 lei	15.5
	8001 - 10000 lei	5.6
	Over 10000 lei	7.7
Current company size	0 - 9 employees	15.1
	10 - 49 employees	20.6
	50 - 249 employees	21.9
	250 - 999 employees	17.2
	1000 employees or more	25.2
Main field of activity	Retail	18.5
	Manufacturing	15.5
	Service Providers	13.3
	Health	11.0
	IT	8.8
	Construction	6.5
	Financial	6.4
	Professional Services	6.2
	Transport, Logistics and Courier	3.8
	HoReCa	3.1
	Telecommunications	2.5
	Energy	1.7
	Tourism	1.6
	Import and Distribution	1.0

Source: own research.

To answer the research question, the Chi-square test was used to test relationships between each of the variables in Table 1 and two questions related to the frequency and type of professional development solutions:

- (1) How often do you benefit from professional development solutions? and
- (2) Which of the following professional development solutions do you benefit from at your current workplace?

Results and discussion

Results

The outcomes show a realistic analysis of a business and social environment found in permanent founder in an agitated political and economic context. Therefore, the highest percentage (32%) is found for occasional professional development solutions, which consider the company's financial resources and the employee or entrepreneurs' willingness to engage in this endeavor. The annual frequency of 15% is close to a monthly commitment of 11%, both being a bit higher than the quarterly percentage of 9%. The weekly frequency of 9% shows an unexpected frequency when

compared with the 3% bi-monthly commitment, leading to an interesting topic to study deeper in further research.

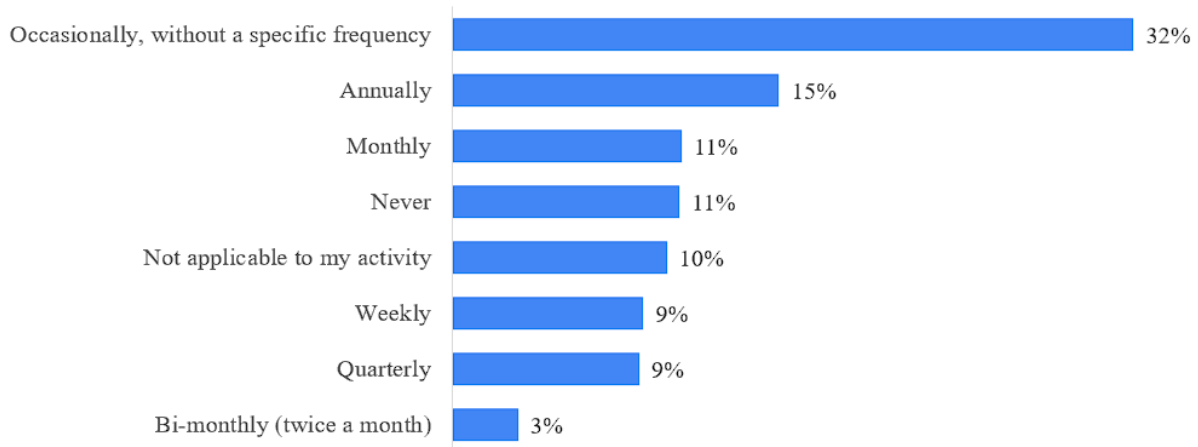


Figure 1. How often do you benefit from professional development solutions?

Source: own research.

Nevertheless, various relationships explain some of the outcomes as follows. An association was found between the frequency (i.e., How often do you benefit from professional development solutions?) and the current occupation of the respondent (X^2 (35, N=918) = 84, $p < 0.001$). Employees in physical roles were more likely to say they never benefited from professional development solutions or that they do not apply to their activity, and they were less inclined to select the “occasionally” or the “bi-monthly” options.

The employees in office roles were less inclined to say, “not applicable,” and more inclined to choose “occasionally.” Technology favors this type of office job roles, as the development offer is more accessible for them, seeing the large range of online programs that depend only on the employee willingness to learn, with no constraints. Entrepreneurs were less likely to say “annually,” while top managers were more likely to do so.

An association was also found between the frequency and the highest completed studies (X^2 (49, N=918) = 90, $p < 0.001$). Bachelor and Master graduates were less inclined to say professional development solutions are “not applicable” to their activities, while high school and vocational school graduates were more inclined to do so. MBA / Executive MBA graduates were more likely to say “bi-monthly,” Bachelor graduates were more likely to say “annually,” and school graduates were more inclined to say “never.”

An association was found between the frequency and individual monthly income (X^2 (35, N=918) = 96, $p < 0.001$). Respondents with 2001 - 4000 lei were more inclined to say “never” or “not applicable,” and less inclined to say “bi-monthly” or “quarterly”. Individuals with incomes higher than 4001 lei were less inclined to say “not applicable”. Respondents with incomes over 10,000 lei were more inclined to say “weekly,” 8001-10,000 lei to say “bi-monthly,” 6001-8000 lei to say “quarterly,” and 4001-6000 lei to not choose “weekly”.

An association was identified between the frequency and company size (X^2 (28, N=918) = 60, $p < 0.001$). Respondents working in microenterprises were more likely to choose “not applicable,” while the ones working for companies with 1.000 employees or more were less likely to do so. Companies with 50-999 employees are more likely to choose “annually,” while

microenterprises are less likely to do so. Companies with 10-49 employees are more likely to say “never”.

An association was retrieved between the frequency and the main field of activity (X^2 (91, $N=918$) = 141, $p<0.001$). Energy and professional services companies were more likely to choose “annually”. IT and Tourism were more likely to choose “bi-monthly”. IT companies were less likely to say “never” or “not applicable”. Transport, Logistics and Courier companies were more likely to say “not applicable”. Financial companies were more likely to say “quarterly” or “weekly”. Health companies were less likely to choose “weekly”.

No association was found between frequency and gender, residential environment, generation, or career stage.

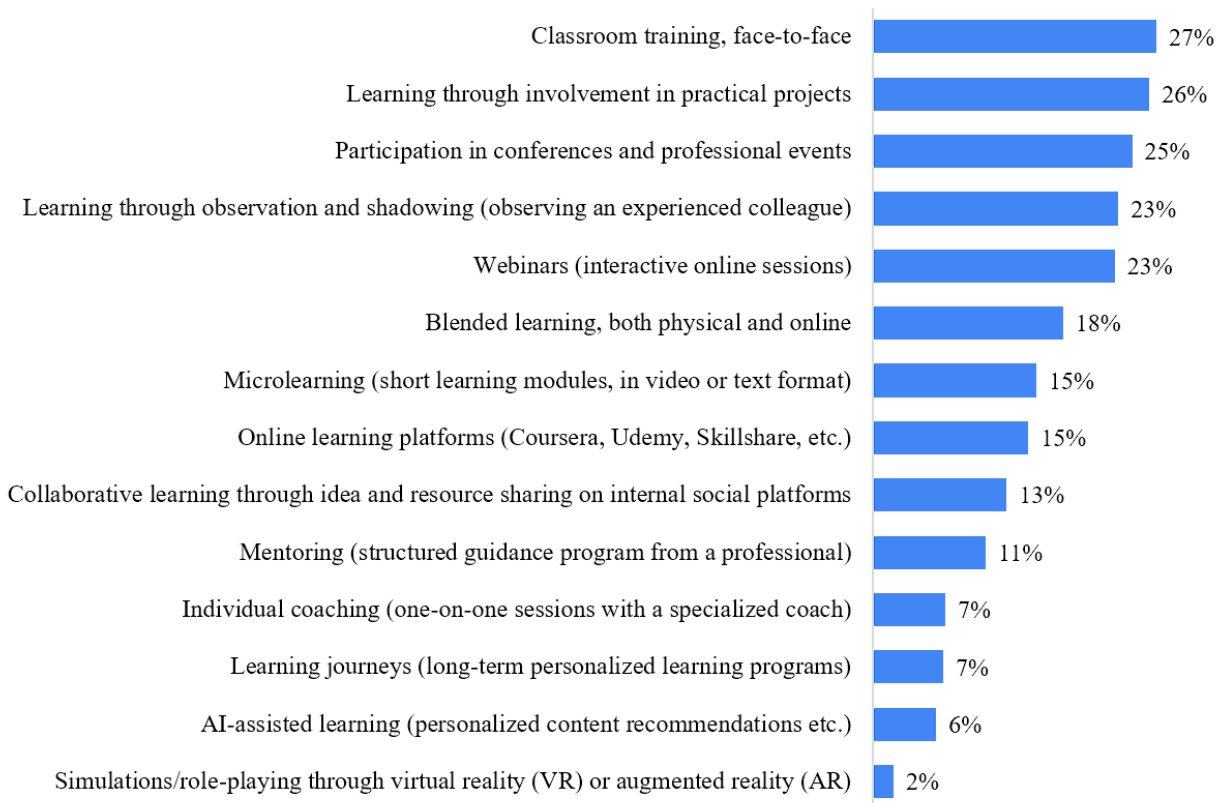


Figure 2. Which of the following professional development solutions do you benefit from at your current workplace? (More than one can be selected)

Source: own research.

Classroom training was the most popular professional development solution, chosen by 27% of respondents, while virtual reality and augmented reality (VR-AR) was the least selected, at just 2% (see Figure 2), most probably also due to the low accessibility to these high-tech solutions. AI-based solutions ranked second to last, with 6% of respondents indicating they benefit from them at their current workplace. Approximately 22% of respondents did not select any options from Figure 2. Meanwhile, 30% selected only one option, 15% selected two options, and the number of respondents decreased progressively for higher numbers of choices.

Respondents living in towns with 10,000-100,000 inhabitants were less likely to choose “webinars,” “involvement in practical projects,” or “microlearning,” X^2 , $p<0.05$. The ones living in villages/communes were more likely to choose “microlearning,” $p<0.05$. The ones living in the capital were more inclined to say, “involvement in practical projects,” or “collaborative learning,” $p<0.05$.

The ones in very large towns were more inclined to say, “participation in conferences,” or “collaborative learning,” $p<0.05$. The ones in medium towns were less inclined to choose “collaborative learning,” $p<0.05$.

Employees in physical roles consistently demonstrated lower engagement with professional development solutions across various formats. They were less likely to choose “classroom training,” “webinars,” “individual coaching,” “participation in conferences,” “microlearning,” “online learning platforms,” “learning journeys,” “collaborative learning,” or “blended learning” (X^2 , $p<0.05$). Middle and top managers were more inclined toward “classroom training” ($p<0.05$), where the physical interaction is higher and potential networking may contribute as well, being critical for career advancement. Middle managers were also more likely to select “learning journeys,” “individual coaching,” “participation in conferences,” “microlearning,” or “webinars” ($p<0.05$). Lower-level managers were also inclined to choose “participation in conferences” ($p<0.05$).

Employees in office roles were more inclined to select “webinars,” “microlearning,” “online learning platforms,” and “blended learning” ($p<0.05$). Entrepreneurs also had an inclination toward choosing “webinars” ($p<0.05$).

Gen X were less likely to select “classroom training,” “webinars,” “individual coaching,” “learning through observation,” or “AI-assisted learning” ($p<0.05$). Millennials were more likely to choose “classroom training,” “webinars,” “learning through observation,” or “AI-assisted learning” ($p<0.05$). Gen Z were more likely to select “individual coaching,” “mentoring,” or “learning through observation” ($p<0.05$).

Respondents in the blossom stage were less likely to choose “learning through observation,” whereas those in the early and mid-stages were more likely to select this option ($p<0.05$). Additionally, early-stage respondents showed a stronger inclination toward “AI-assisted learning,” while those in the blossom stage were less inclined to select it ($p<0.05$).

High school and vocational graduates were less likely to select “webinars,” “participation in conferences,” “online platforms,” or “blended learning” ($p<0.05$). High school graduates were also less likely to choose “classroom,” “microlearning,” or “AI-assisted” ($p<0.05$). Tertiary education graduates were more inclined toward selecting these, as well as “learning journeys” ($p<0.05$).

An association was identified between the type of professional development solution and individual monthly income. Individuals with 2001-4000 lei were less likely to select any of the types ($p<0.05$), except for “learning through observation” where there are no differences among categories of income. The ones with individual monthly incomes of over 10,000 lei were more likely to select any of the types ($p<0.05$), with the exception of “learning through observation,” and “simulations”. Individuals with incomes of 6001-8000 lei were more inclined to select “webinars,” “conferences,” and “journeys” ($p<0.05$). The ones with 8001-10,000 lei did so for “practical projects,” and “online learning platforms” ($p<0.05$).

Respondents employed at companies with over 1,000 employees were more likely to select professional development solutions, whereas those working for microenterprises were less inclined

to do so ($p < 0.05$). Among industries, the IT sector showed the highest inclination to choose various types of professional development solutions, followed by the Tourism and Financial sectors ($p < 0.05$).

No association was found between the type of professional development solution and gender.

Discussion

Although technological integration changed the development scenery, not making a clear distinction between roles (Folabit, N. L. & Jita, L. C., 2024), the actual research distinguishes between the physical and office roles in terms of learning solution usage, favoring the latest, the office roles being more included to choose occasional occurrence. A practical explanation is that physical roles imply specific training needs with out-of-production time, that companies may find complicated to replace during the training period, and the promotions or rewards are not naturally connected. In practice, office roles may access easier learning programs, as the physical presence is not mandatory for the full period, some positions being accessible on hybrid or remote work arrangement, and their career paths embed more knowledge acquiring.

Regarding the educational level, there is a general alignment of scholars' papers, agreeing on association between higher completed study and frequency of development programs personal appliance. Analogously, the individual monthly income is positively associated with the learning incidences. These findings take into consideration the financial effort needed to engage in a learning plan, as a good quality expensive program should be financed by either the company or the employees. In practice, the companies' talent management programs favor a very small percentage of employees with potential to grow their expertise or leadership, making the selection very tough and usually addressing higher hierarchical levels or scarce skills technicity, that we find in the upper income ranges.

Regarding the size of the company, there are likewise positive findings connections when larger size companies are concerned, although, for the SMEs the literature review (Ahlgren, L. and Engel, L.C., 2011), foreseen more development programs implementations than the actual research. These differ according to the domain, having IT, tourism and banking more inclined to choose more frequent learning solutions. The practical key success factor is the companies' financial power, as micro or small organizations are first struggling for survival, with multidisciplinary employees, having hard decisions to choose a type of learning program unless inscribed in a succession plan, versus bigger companies, where also the jobs segmentation is clearer and easier to be addressed, and the financial resources allow learning support.

The frequency and the main field of activity association was found to be more obvious for IT and financial services, less than other industries such as energy, professional services, transport, logistics and courier, most probably due to five reasons. The first refers to their fast-changing business, legislative and technological landscape, being in the avantgarde for implementation, and the second regards their strategic role in the present economy. An example would be sustainability legislation, where the financial services are in the frontline of implementation, assisting businesses by strict rules to apply legislation referring to the Environmental Social and Governance requirements. For the IT sector, the new Generative Artificial Intelligence war, that changed the way we do business, work, research, and teaching and we live, just to cite a few impacts, challenged the entire technology sector that faces now restructuring and transformations, never imagined in the post-pandemic era when IT was considered a stable star. The fourth reason is about the financial

resources that exist in these two industries and the fifth regards the employees' type of profile, willing to engage in learning paths, being conscious of the importance of their relevance on the labor market or on the industry responsibility in a changing world.

It is interesting to notice the residential environment's low association with the frequency in the present study, although, the local environment has profound discrepancies between small, or rural areas and bigger cities (World Bank report, 2023). Even more, the lack of preference for online learning methods, although logistically easier, may consider the national cultural traits to have physical collaborative contact and practical learning, finding the right, but more expensive solution, in a competitive learning and development market. Deeper research could investigate more suitable solution findings that overpass the financial and human resources, exploring the cultural influences as well.

Unlike managers, the entrepreneurs are less likely to engage annually in a training program, that could be explained in practice, on one hand through the managers' time availability and hierarchy's validation to engage in a learning path, and on the other hand, though the entrepreneurial activity's higher uncertainty, that demands constant attention for personal development.

Similarly for generations or career stage, although the rise of digital natives shows more adaptability to new ways of leaning experiences (Henne et al., 2024; (Vysochan et al., 2024). Nevertheless, the senior generations prefer more physical or personalized learning journeys, as the literature indicates for decision-makers as well (Grant & Basye, 2014; Means et al., 2013), as they adopted technology in an accelerated rhythm only in the last professional years, being accustomed with classical training delivery, having general less digital dexterity than youngsters. A difference may be noticed for work-integrated learning generally stated (Jackson D, 2024), as compared with generational variances in the actual research, as the direct, concrete and practical learning process is highly appreciated across the generations.

The physical format is still preferred by almost a third of the respondents, being in line with traditional ways that overlap with more technological solutions (Graham A., 2019), that is found also in the present research, as a second development method preference.

The lack of association between frequency and gender, residential environment, generation, or career stage was explored through a sample that has significant number of answers that make the test relevant. Also, it is highly equilibrated, given the opportunity to identify discrepancies. The gender is almost equally represented, as well as the generations that are intrinsically connected with career stage and the residential environment. The absence of association with frequency could be explained by the generalized need of development in a tensed labor market, that makes it difficult to favor demographic or occupational factors. Even more, the organizations' policies encourage a benefic diversity, leading to increased innovation and better organizational culture.

Conclusion

The quantitative analysis was performed using an online survey, on a sample of 918 valid responses from employees in physical roles (27.2%), employees in an office role (49.3%), low and middle managers (15.4%), top managers (2.1%) and entrepreneurs (5.9%), aged 19-55, currently employed in Romania in various industries, with at least one year of work experience. The study aimed to capture the association of the frequency of diverse development solutions in the current workplace with demographic and occupational factors, such as gender, residential environment, generation,

career stage, highest completed studies, individual monthly income, current company size, and main field of activity.

A positive association is observed between frequency and office roles and managerial position, higher level of completed studies, personal income and size of the company they work for. A third of the total respondents chose one single development solution out of several exiting ones, and preferred the classroom training, while AI-based ranked second to last, with 6% of respondents indicating they benefit from them at their current workplace. The collaborative tools and learning journeys are preferred by the residents of larger cities and middle to top managers, while Gen Z favors learning by observation, contrary to more senior employees. No association was found either between frequency and gender, residential environment, generation, or career stage, nor between type of professional development solution and gender.

The study has several practical contributions. The first one is a better understanding of the employees' preferences for various development solutions, that motivate them to enroll and engage in programs. The second refers to the enhanced learning programs that matches the employee value proposition and increased employer branding. By offering more customized solutions, a third practical contribution regards better talents attraction and retention. The fourth is about a personalized generational approach, that is increasingly important, as participation in the labor market is dynamic. The fifth practical contribution refers to the budget's optimization, in a limited resources allocation within a tense business environment.

There are also several limitations, among which we shall refer to the following four. The first one regards the selection of the number of demographic and occupational chosen factors. By adding additional parameters, a deeper analysis may be explored, with supplementary correlations. The second one is about the general population, that does not loyally reflect the industry's specificities. More granular data could be captured and therefore the methodology to be refined. The residential environment is an important parameter, knowing the rural and urban discrepancies. This may lead to further profound changes in rural learning methodology, including legislative structural modification is the case, to reduce the actual discrepancy when compared with the urban opportunities, that are almost inexistence in practice mainly in big companies, with sufficient financial resources. The fourth limitation regards the exclusive quantitative study, that can be improved with an additional qualitative survey, done with interviews where the respondents do a deeper dive into the personal, professional and industry realities.

References

- Ahlgren, L. & Engel, L.C. (2011), "Lifelong learning through SMEs: exploring workplace learning in the UK", *Journal of Workplace Learning*, Vol. 23 No. 5, pp. 331-348. <https://doi.org/10.1108/13665621111141920>
- Andrews, G.D. (2019). Benefits of online teaching for face-to-face teaching at historically Black colleges and universities. *Online Learning*, 23(1), 144-163. <https://eric.ed.gov/?id=EJ1211047>
- Carroll, J. B. (1963). A model of school learning. *Teachers College Record*, 64(8), 723-733.
- DeRouin, R. E., Fritzsche, B. A. and Salas, E. (2004), 'Optimizing eLearning research based guidelines for learner-controlled training', *Human Resource Management*, 43, 2/3, 147-62.
- Flood, J. (2002), 'Read all about it: online learning facing 80% attrition rates', *Turkish Online Journal of Distance Education*, 3, 2. Available at <http://tojde.anadolu.edu.tr/tojde/articles/jim2.htm>

- Folabit, N. L. & Jita, L. C. (2024). Are academics adapting to students' technology learning preferences? A South African study of teaching identities. *Issues in Educational Research*, 34(4), 1241-1259. <http://www.iier.org.au/iier34/folabit.pdf>
- Grant, P. & Basye, D. (Eds.) (2014). Personalized learning: A guide for engaging students with technology. *International Society for Technology in Education*. <https://www.intel.com/content/dam/www/public/us/en/documents/education/k12-personalized-learning-guidebook.pdf>
- Hekneby, T. & Olsen, T.H. (2024), "The role of leadership in organizational learning in multinational companies", *The Learning Organization*, Vol. 31 No. 2, pp. 141-162. <https://doi.org/10.1108/TLO-09-2022-0101>
- Husen, T. (Ed.) (1967). International study of achievement in mathematics: A comparison of twelve countries (Vol. I). *Wiley*.
- Iman, M.Y., Elahi, N.S., Abid G., Ashfaq F. & Ilyas S. (2020). Impact of perceived organizational support on work engagement. Mediating mechanism of thriving and flourishing. *Journal of Open Innovation: Technology, Market, and Complexity*. Volume 6, Issue 3, September 2020, 82. <https://doi.org/10.3390/joitmc6030082>
- Jackson, D. (2024). Work-integrated learning: opportunities and challenges in Australia. *Higher Education Research & Development*, 43(3), 767–773. <https://doi.org/10.1080/07294360.2024.2307929>
- Jordan, J., Wade, M. & Teracine, E. (2020). <https://hbr.org/2020/02/every-leader-needs-to-navigate-these-7-tensions>
- Levy, Y. (2007), 'Comparing dropouts and persistence in e-learning courses', *Computers & Education*, 48, 185–204.
- Means, B., Toyama, Y., Murphy, R. & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1-47. <https://doi.org/10.1177/016146811311500307>
- Perry, L.B., Thier, M., Beach, P. et al. Opportunities and conditions to learn (OCL): A conceptual framework. *Prospects* 54, 55–72 (2024). <https://doi.org/10.1007/s11125-023-09637-w>
- Taleb, N.N. (2007), *The Black Swan: The Impact of the Highly Improbable*, Random House, ISBN 978-1400063512
- World Bank Group (2023). Un sector privat puternic este esențial pentru a stimula creșterea economică a României, potrivit unui nou raport IFC-Banca Mondială. <https://www.worldbank.org/ro/news/press-release/2023/12/07/strong-private-sector-key-to-drive-romania-s-economic-growth-says-new-ifc-world-bank-report>