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Multigenerational Teams from the Perspective of Knowledge Management Based on the Example of a Selected Public University

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ABSTRACT

Objective: The purpose of the article is to answer the following questions: What are the problems faced by university managers responsible for managing multigenerational work teams? Is it possible, and if so, what are good practices in integrating the potential of multigenerational teams of employees? What is the overall assessment of multigenerational teams – do university executives see them as an opportunity or a burden?

Research Design & Methods: Qualitative research in the form of a case study was carried out. This method included seven individual interviews with executives at the Faculty of Organization and Management at Lodz University of Technology.

Findings: Executives at the selected university identify various types of problems in managing multigenerational teams, while recognising opportunities to integrate the potential inherent in age-diverse teams. Respondents are mostly positive about intergenerational teams, but they also note some difficulties for managers related to having a multigenerational team.

Implications/Recommendations: The role of people responsible for leading multigenerational teams is becoming increasingly demanding. Striving to achieve equal involvement of representatives of all generations in the work is one of the most difficult challenges faced by university managers today. The effort, however, is worth making, as any diversity can positively influence the team and foster improvements in knowledge management.

Contribution: The article adds to the characterisation of each generation of employees with aspects from a knowledge management perspective.

Article type: original article.

Keywords: multigenerational team, knowledge management, Baby Boomers, Generation X, Generation Y, Generation Z.

JEL Classification: M12, I23.

1. Introduction

Four generations are currently represented in the Polish labour market: Baby Boomers and Generations X, Y and Z (PARP, 2023). Each of them is characterised by different traits. Under conditions of a dynamically developing economy based on the latest technologies, they can become key factors in the success of the organisation or an impediment, posing a serious obstacle for managers. Knowing this allows us to get to know the motivations of each group of employees, and their expectations of team members, supervisors and employers, and, in the future, to plan their career paths in a more conscious way. This, in turn, can prove crucial from the perspective of those creating new knowledge that needs to be managed. Through knowledge management, many modern organisations achieve their goals (Harvani & Survasari, 2020). This is also true for universities, which, as institutions of learning, play an important role in the creation, diffusion and commercialisation of scientific knowledge. Therefore, their development has always been inextricably linked to knowledge management (Wojnarowska & Wróbel, 2009). It is at the core of the competitive advantage of any knowledge-based organisation, including universities (Mahdi, Nassar & Almsafir, 2019). In the case of universities, knowledge management consists of planned activities undertaken by individuals or teams of university researchers aimed, among other things, at acquiring, disseminating, and verifying different types of knowledge in order to realise the learning outcomes of individual fields of study and to conduct their own or commissioned (by public or private business entities) scientific research work in both physical and virtual spaces (Boguski, 2013). Rowley's (2000) observation that in order to improve knowledge management at universities, there is a need to address the prevailing norms and values in relation

to knowledge remains valid. The author also noted that a decentralised management structure and a culture of individualised creativity are needed for successful knowledge management at universities. In this regard, it is worth noting, among other things, the need to involve the right people in knowledge processes, the roles played by individual communities, convincing employees to document their core knowledge, making everyone aware that knowledge management takes time, and assigning specific roles to individuals. In turn, the internationalisation of higher education, lifelong learning, the shift from teaching to learning, new technologies and globalisation are all key factors in the development of knowledge management in higher education institutions, as pointed out by Dhamdhere (2015). To make this process as effective as possible, university employees are increasingly required to develop digital skills and their educational applications (Jorge-Vázquez et al., 2021). In addition, it should be noted that by 2025. 50% of all employees, including those in universities, will require retraining due to the development of new technologies, and it will be necessary to integrate knowledge into support systems for education (Li, 2022; Mahmud & Wong, 2022).

With all this in mind, answering the following questions was identified as the purpose of the study:

- what are the problems faced by university managers responsible for managing multigenerational employee teams?

- is it possible, and if so, what are good practices in integrating the potential of multigenerational work teams?

- what is the overall assessment of the work of multigenerational teams – do university executives see them as an opportunity or a burden?

In order to realise this goal, an empirical study in the form of a case study was conducted in a deliberately selected public university. Therefore, the article is theoretical and empirical in nature. In the first section, four generations of employees are characterised based on a literature review, in the second one the research methodology is presented, in the third section the main research results are presented. The article ends with a summary, which includes the most important conclusions, points out the limitations of the conducted research and indicates directions for future scientific inquiry.

2. Characteristics of Four Generations of Workers

Employee teams in modern organisations, including universities, are increasingly age-diverse. Table 1 describes the characteristics of employees of different generations, and indicates their characteristics from a knowledge management perspective.

The characteristics presented differentiate the values held by representatives of each generation. According to the Society for Human Resource Management, values are the main source of differences between generations (SHRM, 2004). They are defined in different ways by researchers. In the most general terms, values should be understood as an individual's beliefs about what he or she considers relatively permanent, desirable and appropriate (Twenge *et al.*, 2010). Values motivate people to act, indicate the direction of their activity, and are the basis for formulating the social norms of an organisation. Knowing what the representatives of each generation value most is important in the context of knowledge management and allows for continuous improvement of the organisation, working conditions and cooperation. In addition to the many differences in the values professed by each generational teams, which, over time, can become self-managing teams. Shared values will create an organisational culture that is characteristics included in Table 1 is the list of work-related values valued by employees of each generation, which is provided by Gadomska-Lila (2020).

Name of Generation of Workers	General Characteristics	Features from the Perspective of Knowledge Management	
Baby Boomers	 born 1946–1964 high stability in behaviour respect for authority high commitment to work and loyalty to the employer, whose recognition is an important criterion for job satisfaction different ways of dealing with the use of Internet technology exhibit characteristics of indi- vidualists and idealists 	 representatives of this generation are a treasure trove of tacit knowledge, resulting from years of professional experience are not always willing to share their knowledge, and if they do, it happens that they expect individual benefits from it 	
Generation X	 born 1965–1979 appreciation of stability and quiet work that does not require new challenges, high respect for work equal attention to the quality of private and professional life independence in decision- -making conscientiousness cooperative attitude 	 a Generation X employee has valuable tacit knowledge and is willing to share it with less experienced co-workers is often an authority for co-workers 	

Table 1. Distinguishing Features of the Four Generations of Workers

Name of Generation of Workers	General Characteristics	Features from the Perspective of Knowledge Management	
Generation Y	 born 1980–1994 quick access to information, creation of communities, fast communication strong need to be surrounded with electronics need for independence, but also seeking mentorship flexibility and openness to change willingness to learn reluctance to make long-term commitments investing in themselves greater focus on themselves, their needs, benefits less loyalty to employers 	 representatives of this generation can be high-class knowledge workers, creating value for the organisation very easily locate and acquire knowledge 	
Generation Z	 born after 1995 the Internet and electronic media are essential to daily functioning wants to achieve a career imme- diately, without effort, perform less well in conditions requiring a high level of commitment mobility and foreign language skills what for older generations is a threat, for representatives of Generation Z is an object of fascination and a field for exper- imentation seeks diversity, escapes routine is eager to communicate with other cultures, wants to travel abroad, constantly changes and improves established processes and tries new working methods values teamwork can do many things at once, employees of this generation find it difficult to focus on one activity 	 can be high-end professionals with desirable skills and com- petencies it is easier for an employer to attract a Generation Z employee than to retain one for the long term 	

Source: the authors, based on: Hysa (2016) and Kaczmarek (2019).

3. Research Methodology

Qualitative research in the form of a case study was devoted to the realisation of the purpose of the study. A case study is an in-depth study of phenomena and processes that contributes to a better understanding of the reality that is the subject of the study (Czakon, 2013). The Faculty of Organization and Management of Lodz University of Technology, which from January 1, 2022 implemented a new organisational structure, was deliberately chosen as the research subject. Two units were established at the faculty: the Institute of Management and the Institute of Marketing and Sustainable Development. Responsibility for their management was entrusted to institute directors and deputy institute directors for education and science, respectively. Importantly, these are people who hold other very important leadership positions in the faculty at the same time, including dean, associate dean for development, head of the management science and quality discipline, chairman of the faculty council, and many others. All other faculty employees are supervised by the head of the dean's office. Table 2 shows the employment structure of the Faculty of Organization and Management, dividing employees by generation.

Unit Name	Number of Workers Representing Baby Boomers	Number of Workers Representing Generation X	Number of Workers Representing Generation Y	Number of Workers Representing Generation Z
Institute of Management	6	29	10	1
Institute of Marketing and Sustainable Development	3	22	10	1
Administration, dean's office and business staff	5	11	9	1
Total	14	62	29	3

Table 2. Structure of Employment at the Faculty of Organization and Management (as of 15.05.2023)

Source: the authors, based on collected data.

In May 2023, seven individual interviews were conducted with executives from the faculty. Valuable guidance on preparing and conducting interviews was obtained from the work of Glinka and Czakon (2021). These were free (non-standardised) interviews conducted remotely using MS Teams according to the authors' interview instructions. The average interview lasted about 20 minutes, all of them together took over 2.5 hours. Five women and two men participated in the survey (all respondents represented Generation X). Three interviewees have the title of professor, two have post-doctoral degrees, one has a doctoral degree and one has a master's degree. Meetings were recorded with the consent of the interviewees. Qualitative data were analysed using content analysis, it was line-by-line analysis of the transcribed text (Corbin & Strauss, 2008; Tran *et al.*, 2022). To present the results, quotes were used, which give voice to the respondents themselves, and at the same time increase the credibility of the qualitative research and allow for a better understanding of the research results obtained (Czernek-Marszałek & McCabe, 2022; Czernek-Marszałek & Piotrowski, 2022). Each respondent was marked with an individual code placed at the end of each quote.

4. Findings

The research showed that interviewees identify various types of problems in managing multigenerational work teams. Among others, attention was drawn to:

1. Communication problems:

We can't quite talk on the same levels, we don't exactly interpret certain facts or related actions in the same way [R1].

For each generation, you have to frame the message differently to make it effective and understandable. For each generation, what is important is different and it needs to be articulated differently in the message [R4].

2. Problems related to the approach to work and expectations of the employer:

I have some problems in the area of lack of openness to new solutions, these are people used to how things were before, to certain developed paths, solving problems, and any novelty arouses quite a lot of resistance in them [R6].

3. Problems related to approaches to and preparation for research:

Baby Boomers and Generation Y (...) both need support, which is due to a lack of adequate knowledge and competence, that is, employees are not able to direct themselves independently to research and publication activities. The difference is that Generation Y has the right not to have experience yet, Generation Z certainly has this right, while Baby Boomers have worked a lot of their professional lives in organisations, let's say, where science was not a priority, and this applies, of course, to most universities in Poland (...). Science and internationalisation of science have become a priority over the last decade (...). Inability to self-discipline in scientific activities (...) [R5].

Among the interviewees, there were also claims that the various types of problems that executives face in their daily work are rather conditioned by the character and personality traits of individuals, or their degrees and titles, while age itself plays a less important role. One respondent even stated:

To be honest, I don't identify these problems at the age and generation level, but rather at the level of character of individuals [R3].

Respondents' opinions were very divided on the question of which generation poses the greatest challenge to executives:

Baby Boomers, these are people who have a stable position at the university and are not so scientifically involved, because they also have this intensive period behind them (...). These people do not keep up with new trends and are not able to handle all these new programmes, and this is a big challenge, because at this point if we talk about systematic literature review it will definitely be a bigger problem for Baby Boomers, this is also where some X's already have problems [R2].

(...) Y, and then secondarily the oldest ones. That's because it's Generation Y that I compare to what I was like at their age, and at that stage of career development I have the impression that I was more independent, and I needed less guidance in everything [R3].

Generation X is the biggest challenge, Y is a smaller one [R5].

I think both Baby Boomers and Z (...). These are the generations furthest from me [R4]. It's certainly a challenge to manage diversity, different people, but not so much by generation but by personality (...). The challenge is the personalities in each group [R7].

The interviewees invited to the research also shared their experiences in integrating the intergenerational potential. Respondents agreed that excellent opportunities for this are provided, for example, by conferences, training sessions and workshops. Working on common goals and assigned tasks, creates conditions for learning regardless of generational identity:

Any joint, integrative activity (...) where there is a group that, for example, does something together, they have some tasks to do or have a common goal to be achieved (...) [R3].

For some respondents, it is possible to integrate intergenerational research potential:

X can benefit from this greater agility when it comes to new tools that support both literature review and analysis of primary research results. Here I think this collaboration between X and Y should be developed (...) [R2].

It all depends on the people and the integrator. If the integrator is incompetent then he or she won't integrate the group and people won't want to. On the other hand, if we have some common goals, by "common" I emphasise that everyone also shares this goal, and it is not only the goal of the manager or the dean, then they will integrate. The whole skill in this multigenerational management is to set a goal and to make this goal attractive to Baby Boomers, X, Y and Z and then this integration is possible [R7].

In contrast, some respondents see some limitations in this regard:

I think the formation of intergenerational research teams is quite limited (...). There is no such problem with didactics, it is possible to share subjects among several teachers. In the didactic area, cooperation between generations is much easier than in the research area, and I think it can be much more effective and interesting for students [R5]. Responding to the question of what is the overall evaluation of multigenerational teams, whether managers see them as an opportunity or a burden, respondents were also divided. An interesting fact is that all of the female respondents evaluate multi-generational teams positively, i.e. as an opportunity:

I, for one, think this is definitely an opportunity. (...) I think it's an opportunity to use the knowledge of different people in different areas, that is, the expertise of Baby Boomers, Generation X has a lot of experience in doing science, Y and Z bring knowledge of new tools and trends, and on the other hand, they can also build on what these older colleagues can give (...). If the teams were of one generation, there would definitely be limited prospects for development [R2].

While being very difficult, I see it absolutely as an opportunity. I can't say it's a burden, although it requires me to have a completely different outlook, perhaps, than if I were in charge of a team of my generation only. I absolutely see it as an opportunity, and I hardly see it as a challenge [R4].

Definitely an opportunity, even though it is a challenge, I can honestly say (...) [R6].

The biggest advantage in my opinion is that each generation looks at things from its own perspective, that is, from the perspective of different experiences (...) the older ones can learn from the younger ones, but at the same time pass on their experience to the younger ones (...) [R7].

Men, on the other hand, recognise some of the difficulties of leading multigenerational teams:

Opportunity because when there are problems I have to develop things in myself that I haven't used so far, opportunity because I have to motivate people who were previously disadvantaged, and then it translates into quite good results. Burden, because to get certain people to do things like this, it requires a non-standard approach from me, more work, and if there are no positive results it falls on me in a way, so there are opportunities, and there are burdens too [R1].

Interviewee: Opportunity because these "raisins" [people from the BB generation – authors' note] are, let's say, ethical role models, from whom it is always worth learning, role models of scientists, reliable scientific work, etc. On the other hand, it is a burden, because now one must often work under time pressure, they certainly can't cope with it. For many of these people the language barrier is a problem, or handling analytical, statistical packages, for example, so these barriers are not insignificant [R5]. Researcher: Also such basic software (...).

Interviewee: Well, that's right, or the ability to access literature in electronic sources. These limitations are not insignificant, this is already some kind of intergenerational gap, and let's remember that in the meantime there has been a transformation, also at universities. We learned the profession in different conditions than they did [R5].

5. Discussion and Conclusions

Literature studies, as well as the results of the qualitative research, lead to some conclusions:

- the role of those responsible for leading multigenerational teams is becoming increasingly demanding. This observation corresponds with the analyses made by Gadomska-Lila (2020);

- the least numerous group of employees at the Faculty of Organization and Management are representatives of Generation Z. Therefore, one should agree with the statement of other researchers that universities still have work ahead of them to improve the employability of their graduates (García-Álvarez *et al.*, 2022);

– one of the significant constraints to knowledge management in intergenerational teams at the selected university is the varying levels of digital competence of its employees. A study by Jorge-Vázquez *et al.* (2021) found that lecturers mostly have an average level of digital literacy that does not depend on gender, but instead depends on the generational cohort. The results confirmed that representatives of younger generations have more advanced digital skills which is in line with the opinions of managers at the Faculty of Organization and Management. In this regard, university employees should be provided with adequate motivation and training to develop their digital competencies in order to bridge the apparent intergenerational gap in their use. Wodecka-Hyjek *et al.* (2022), among others, have written about the significance of this problem;

- different expectations of employees of different generations, and differences in work and communication styles motivate the creation of a new work environment that unites all generations. Gajda's (2017) observation that the key to success is to competently integrate and utilise intergenerational differences within a single work team to benefit the organisation remains valid;

- striving to achieve equal involvement in the work of representatives of all generations is a difficult task faced by managers of modern organisations today, including universities. However, the effort is worth undertaking from a knowledge management perspective. The most important thing should be to recognise the initial situation, i.e. what are the possible risks associated with the age diversity of employees, as Fazlagić (2014) points out;

- the strength of a multigenerational team lies in the fact that its members can learn from each other. The process of knowledge exchange takes place from the most to the least experienced, in terms of competence from those who have it to those who need it, regardless of age (Zając & Łukasik, 2012);

 – any diversity can have a positive impact on the team and be important for the development of knowledge management, increased creativity and efficiency, which in turn is important for the success of the entire organisation (Rakowska & Mącik, 2016); – in order to successfully manage multigenerational teams at a higher education institution, it is necessary to create values that integrate all participants in the organisation and allow the creation of the currently desired organisational culture based on individual creativity. Such a culture will enable the best use of the diverse competencies of employees who are representatives of different generations.

In conclusion, the article provides knowledge about the characteristics of representatives of each generation from the perspective of knowledge management. However, this knowledge may be limited due to the fact that the conducted research does not allow the results to be generalised. In addition, the results obtained from the interviews are influenced by the personal perspective and subjectivity of the interviewees. Another limitation is that only the perspective of executives was examined. Therefore, a follow-up study is planned. This will be a quantitative study, to which all employees of the Faculty of Organization and Management will be invited. It would also be an interesting research direction to research the situation at other Polish universities.

Authors' Contribution

The authors' individual contribution is as follows: Each contributed 50%.

Conflict of Interest

The authors declare no conflict of interest.

References

Boguski, J. (2013). Zarządzanie wiedzą w uczelni wyższej. *Nauka i Szkolnictwo Wyższe*, 2(42).

Corbin, J., & Strauss, A. L. (2008). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory (3rd ed.). SAGE.

Czakon, W. (2013). Zastosowanie studiów przypadku w badaniach nauk o zarządzaniu. In: W. Czakon (Ed.), *Podstawy metodologii badań w naukach o zarządzaniu*. Oficyna a Wolters Kluwer business.

Czernek-Marszałek, K., & McCabe, S. (2022). Why Qualitative Papers Get Rejected by Annals of Tourism Research? *Annals of Tourism Research*, 92, Article 103338. https://doi.org/10.1016/j.annals.2021.103338

Czernek-Marszałek, K., & Piotrowski, P. (2022). Cyfryzacja w przedsiębiorstwach turystycznych w warunkach COVID-19. Pozytywne i negatywne konsekwencje. *Przegląd Organizacji*, 4(987), 3–12. https://doi.org/10.33141/po.2022.04.01

Dhamdhere, S. (2015). Importance of Knowledge Management in Higher Education Institutes. *Turkish Online Journal of Distance Education*, *16*(1), 162–183. https://doi.org/ 10.17718/tojde.34392

Gadomska-Lila, K. (2020). Value Systems of Various Generations. *Human Resource Management*, 133(2), 27–40. https://doi.org/10.5604/01.3001.0014.0731

Gajda, J. (2017). Integrowanie międzypokoleniowego potencjału szansą na przezwyciężenie skutków procesu starzenia się polskiego społeczeństwa współczesnej organizacji. Zeszyty Naukowe Politechniki Częstochowskiej Zarządzanie, 1(25), 30–40.

García-Álvarez, J., Vázquez-Rodríguez, A., Quiroga-Carrillo, A., & Priegue Caamaño, D. (2022). Transversal Competencies for Employability in University Graduates: A Systematic Review from the Employers' Perspective. *Education Sciences*, *12*(3), Article 204. https://doi.org/10.3390/educsci12030204

Glinka, B., & Czakon, W. (2021). Podstawy badań jakościowych. PWE.

Fazlagić, J. (2014). Zarządzanie różnorodnością a zarządzanie wiedzą. *e-mentor*, 1(53), 54–61. Retrieved from: http://www.e-mentor.edu.pl/artykul/index/numer/53/id/1078 (accessed: 1.12.2023).

Haryani, C., & Suryasari, S. (2020). Critical Success Factors of Knowledge Management in Higher Education Institution. *International Journal of New Media Technology*, 7(2), 111–118. https://doi.org/10.31937/ijnmt.v7i2.1761

Hysa, B. (2016). Zarządzanie różnorodnością pokoleniową. Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie, 97, 385–398.

Jorge-Vázquez, J., Náñez Alonso, S. L., Fierro Saltos, W. R., & Pacheco Mendoza, S. (2021). Assessment of Digital Competencies of University Faculty and Their Conditioning Factors: Case Study in a Technological Adoption Context. *Education Sciences*, *11*(10), Article 637. https://doi.org/10.3390/educsci11100637

Kaczmarek, M. (2019). Generacja Baby Boomers na rynku bankowości internetowej w Europie. *Wiadomości Statystyczne. The Polish Statistician*, 64(8), 5–18. https://doi.org/ 10.5604/01.3001.0013.7598

Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and beyond. *Information Systems Frontiers*. https://doi.org/10.1007/s10796-022-10308-y

Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge Management Processes & Sustainable Competitive Advantage: An Empirical Examination in Private Universities. *Journal of Business Research*, *94*, 320–334. https://doi.org/10.1016/j.jbusres.2018.02.013

Mahmud, M. M., & Wong, S. F. (2022). Stakeholder's Perspectives of the Twenty-first Century Skills. *Frontiers in Education*, 7, Article 931488. https://doi.org/10.3389/feduc.2022.931488

PARP. (2023). Cztery pokolenia na polskim rynku pracy. Retrieved from: https://www.parp.gov.pl/attachments/article/83979/17%20marca%20Cztery%20pokolenia%20na%20 rynku%20pracy.pdf (accessed: 1.12.2023).

Rakowska, A., & Mącik, R. (2016). Zaangażowanie pracownika a satysfakcja z pracy – modelowanie zależności z wykorzystaniem PLS-SEM. *Przegląd Organizacji*, 5(916), 48–58. https://doi.org/10.33141/po.2016.05.07

Rowley, J. (2000). Is Higher Education Ready for Knowledge Management? *The International Journal of Educational Management*, 14(7), 325–333. https://doi.org/10.1108/ 09513540010378978

SHRM. (2004). *Generational Differences Survey*. Society for Human Resources Management.

Tran, L. T., Ngo, N. T. H., Nguyen, H. T. M., Le, T. T. T., & Ho, T. T. H. (2022). "Employability in Context": Graduate Employability Attributes Expected by Employers in Regional Vietnam and Implications for Career Guidance. *International Journal for Educational and Vocational Guidance*. https://doi.org/10.1007/s10775-022-09560-0

Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational Differences in Work Values: Leisure and Extrinsic Values Increasing, Social and Intrinsic Values Decreasing. *Journal of Management*, *36*(5), 1117–1142. https://doi.org/ 10.1177/0149206309352246

Wodecka-Hyjek, A., Walczak, M., Náñez Alonso, S. N., & Ziębicki, B. (2022). The Impact of COVID-19 on the Expectations of Employers in the Scope of the Skills of Business Schools' Graduates. In: S. N. Náñez Alonso, R. F. R. Forradellas (Eds), *Digitalización de empresas y economía: tendencias actuales*. Dykinson.

Wojnarowska, M., & Wróbel, P. (2009). Uwarunkowania zarządzania wiedzą w szkołach wyższych. *e-mentor*, 5(32). Retrieved from: https://www.e-mentor.edu.pl/artykul/index/ numer/32/id/697 (accessed: 1.12.2023).

Zając, M., & Łukasik, K. (2012). Zarządzanie wiekiem w przedsiębiorstwie. In: K. Łukasik (Ed.), *Wyzwania i perspektywy współczesnego zarządzania*. Sekcja Wydawnictw Wydziału Zarządzania Politechniki Częstochowskiej.