Workplace E-Learning: What, Where, Why and How: A Case Study from the Czech Republic

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Abstract

Developments at work and in the workplace are constant activities, and an organisation's activity in e-learning belongs in this process too. This means that workplace e-learning represents a significant burden for an organisation. A qualitative case study from the Czech Republic was done on the basis of interviews with two groups: content administrators (two respondents) and learners (six respondents), who are familiar with e-learning. Analysis reveals various factors and trends that the organisation must consider when implementing e-learning. On the basis of the data obtained, it is clear that e-learning increases flexibility, more precisely in terms of costs, time and individual approaches. Participants concentrate on learning and do not focus on the content; the main goal remains passing the e-course. However, the quality of the system and the ease of using it varied, as did the interactivity of the e-courses. The main advantages are flexibility and productivity, and the main disadvantages are a lack of mutual contact and human interaction. Future trends will be the increase of e-learning, pre-work onboarding, the cloud and m-learning. When implementing e-learning, an organisation must consider the pros and cons and pre-tests/evaluations, and it must simplify the resolution process of any issue, be prepared to provide face-to-face education and make choices regarding the time aspect and learning material. The current qualitative case study in e-learning and prevailing trends form the foundation of the future direction and development of this field for educational and training purposes. The findings indicate that there will be a steady, but notable, increase in workplace e-learning to enhance all training methods at work. The study contributes to our understanding of workplace e-learning.

Keywords: E-learning, workplace e-learning, quality, pros and cons, future trends, Czech Republic

1. Introduction

We spend a great deal of time at home, and some of us enjoy the positive benefits of e-learning, as Beno & Hvorecky (2021) emphasise, as well as of being connected to one another and collaborating anywhere and at any time, using almost any device. Identifying ways in which learning at work and for work can be promoted is generally a long-term concern in our society. Traditionally, organisations

deal with the main problem, namely how to educate, train and familiarise their workers with e-learning so that they are able to perform their work efficiently, because, with regard to learning, what is good for the workforce is good for the company (Serrat, 2010). Crnjac Milić et al. (2020) emphasise that being competitive depends on the potential of being able to adapt to new technologies and working conditions. Dhawan (2020) further emphasises that in times of crisis technology is useful to combat disruption and enable communicating and working virtually.

However, today's methods of education seem unable to teach and prepare the potential workforce adequately for real life and business situations. This causes potential problems for employers. The learning process must go beyond mere familiarity with core subjects and must include modern pedagogical and technical skills. Employee motivation plays a major role in gaining a competitive advantage (Lavičková et al., 2021, p. 86). Due to the globalisation of the economy, traditional learning processes and training methods may not always work in a real business environment. Both business environment and education face multiple challenges. As Attwell stressed (2004, p. 63): "We are still at a stage of experimentation in e-learning." Social and demographic changes force organisations and training providers to evaluate those they train and how they train them. It is well-known that only a few organisations evaluate their e-learning projects, mostly for measuring the number of learners or costs issues. Training evaluation continues to be a challenge for workplace learning and development professionals (Srimannarayana, 2017).

Despite the widespread use of e-learning in the Czech Republic (Eger & Egerová, 2013; Eurostat, 2022), there has been very little research on workplace e-learning programmes, and academic literature is especially lacking in examining the impact of these programmes or determining the most appropriate structure for them. There is clearly a need for further study of e-learning, especially in organisational settings, in order to make it more effective, attractive and efficient.

The objective of this study was to shed more light on workplace e-learning, to address the current research gaps on workplace e-learning and to clarify which factors organisations should consider when implementing workplace e-learning practices, and also to study the advantages and disadvantages and determine the factors that must be taken into consideration in the future. Qualitative data were used to find answers to the following research questions: (i) RQ1: Why have organisations implemented workplace e-learning? (ii) RQ2: How do users perceive and use the e-learning system within the organisation? (iii) RQ3: What are the advantages and disadvantages of workplace e-learning? (iv) RQ4: What needs, factors and trends have to be taken into consideration in the future?

The structure of this paper is as follows: definition of workplace e-learning, methodology, analysis of interviews, discussion and summary of findings.

2. Workplace E-Learning

Unfortunately, even in the 21st century, there is still no standardised definition of e-learning. E-learning refers to the use of information and communication technologies to enable access to online learning/teaching resources (Arkorful & Abaidoo, 2014, p. 398). We define e-learning as a learning system based on teaching using electronic resources, the so-called network transfer of skills and knowledge, where education is provided to a large number of beneficiaries at the same or at different times, mostly via the Internet, which is available anywhere and at any time.

The workplace is a work environment made up of elements that can affect workforce productivity, including when, where and how you work. This means that the workplace varies from outdoors to indoors in an office or at home and to remote settings.

Workplace e-learning can therefore be defined simply as using a suitable device for learning/teaching "in the flow of the work" to help the workforce to build the necessary skills and knowledge to perform its duties better.

Subramaniam & Nakkeeran (2019) emphasise the importance of e-learning in the workplace by describing it as "corporate e-learning". The authors further highlight the main benefit of the enhancement of the performance of teams even though they are geographically separated. Innovative

teaching methods using modern information and communication technology correlate with a positive impact on the methods of teaching and learning (Flogie et al., 2018). The effectiveness of e-learning also includes better service and lower cost (Bates, 2010). Jia et al. (2011) add the benefits of maintaining knowledge and skills and the flexibility of the available materials. Pontefract (2014, p. 397) concludes simply that organisational learning is an investment in a company's people.

The implementation of e-learning involves various barriers, Ali et al. (2018) identified 68 of them. Vancell (2019) stresses that a rigorous and well-planned evaluation process is therefore critical, for example, before training, adapting the training environment to meet the needs of older workers is necessary (Beinicke & Kyndt, 2019). Costello & McNaughton's (2018), analysis reveals that dynamic environments correlate with the use of e-learning to support innovative and adaptive processes and evaluate the e-learning. Zhang & Rieckmann (2018) emphasise that the evaluation process should consider context, input, process and product under a cross-disciplinary background. Kapo et al. (2020) conclude that the most powerful determinants of continuous use of e-learning are personal factors, environmental influences and technological aspects. Pashev et al. (2020) used an adaptive workflow e-learning model in workplace education to test the way personal goals correspond with company management goals for the relevant job positions.

3. Methods

A qualitative study was used for the research process once the company had been chosen where the semi-structured interviews were to be conducted. The research started with the theoretical part where the authors discovered that the utilisation of e-learning in the workplace had not received appropriate attention in research. A qualitative research approach allows the researcher to gain a comprehensive and in-depth understanding of a subject by evaluating small samples (Collis & Hussey, 2014, p. 50). The structure of the interviews was loosely based on DeLone & McLean (1992), DeLone & McLean (2003) and Wang et al.'s (2007) dimensions/categories. Interviews were conducted on an individual, face-to-face and semi-structured basis. A coding method was used to facilitate the analysis of the data obtained in the qualitative research from the semi-structured interviews (Beno, 2021). In this study, a three-level coding scheme based on research questions was created.

3.1 Sampling

Employees of a Czech company (specialising in the production and development of machine tools) were specifically asked to participate in this investigation. The sample included eight participants. It consisted of three females (F-H) and five males (A-E) with ages ranging from 23 to 66 (see Table 1). Respondents were divided into two groups:

1. **Content administrators**, consisted of two participants (A and B). A is an instructor and creates courses for e-course participants, and B has extensive knowledge and experience of the features, technical aspects and implementation of the platform and acts as its administrator. B is therefore in charge of managing the platform and the technical support framework.
2. E-learning users, the so-called **learners**, consisted of six participants. Gender balance was respected.

Table 1: Breakdown of sample participants

Country	Group		Participants	Gender	Age
Czech Republic	Content administrators		A	M	46
			B		58
	Learners		C	M	66
			D		59
			E		47
			F	F	23
			G		43
			H		43

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3.2 Data collection

Before the start of the face-to-face interviews, a pilot test was conducted and the intended questions for both groups were redefined. Each respondent was interviewed for 60 minutes. The questions, in two different versions for content administrators and learners, were in their mother tongue and were divided into the following groups: 1) Basic data of respondents 2) Information quality, 3) System quality, 4) Service quality, 5) System utilisation, 6) User satisfaction, 7) Advantages, disadvantages and risks, and 8) Future and trends.

3.3 Data Analysis

As Beno (2022, p. 33) explains: "the analysis of the textual data (the interview transcripts) involves a demanding conversion process and requires a systematic data-processing approach." A three-level coding scheme, as shown in Table 2, was used.

Table 2: Coding scheme

Code level 1	Code level 2	Code level 3	Items
Quality	Information quality	Interaction	Information, comprehensibility, intelligibility, quality; supply, demand, consultation, restrictions, control; telephone, fax, letter (mail); video conferencing, chat; email, discussion forums; games, tests, quizzes, puzzles; advice, motivation, coaching; help, technical knowledge; virtual wizards, technical support system
		Content moderation	
		Learning vs content centring	
		Individual support	
		Focus on goal vs development	
	System quality	Traditional communication media	
		Synchronous communication media	
		Asynchronous communication media	
		Gamification	
	Service quality	Adaptivity and personalisation	
		Synchronous communication options	
		Technical availability of content and assistance	
E-learning	System utilisation	Planning and preparation for implementation	Dating process, didactics; adequate resources for planning, development, implementation and maintenance of the e-guidance system; considered the programme useful for graduation; top-down implementation throughout the organisation; scheduling how much time, average time it takes to complete training; adaptability and personalisation; e-learning is a supportive method
		Time	
		Technical infrastructure	
		Design	
		Development	
		Realisation	
Evaluation	User satisfaction	Perceived usefulness	Satisfaction with e-learning; the usefulness of e-learning; there is a lack of reliable ways to measure efficiency; collecting user feedback; feedback-based innovation; mass collection of feedback; cost savings, flexibility, the possibility of an individual approach; increase employee productivity; return on invested funds; finding new solutions; streamlining processes; new opportunities; streamlining the management of the organisation; problems of motivation, lack of human interaction; issues of e-learning and introductory training; different people have different learning styles and needs; absence of physical contact; ideas, observations, plans; m-learning; combination of full-time teaching and e-learning; efficiency; blended learning, m-learning, micro-learning, artificial intelligence
		Frequency	
		Satisfaction	
		Cooperation	
	Advantages & disadvantages	Individualisation and needs	
		Practical advantages	
		Individual non-economic costs	
		Economic costs	
		Flexibility	
	Future and trends	Individualisation and needs	
		Implementation of e-learning in other organisations	
		Onboarding	
		Information transparency	
		Development plans	
		Suggestions for improving e-learning	
		Perspectives of implementing new trends	
		Implementation of trends	
		Dominant trends in e-learning in the organisation in the future	

Data analysis was conducted through detailed analysis and comparison of the examined three-level

codes that detected identical or different approaches, attitudes, views, knowledge and particular inclinations.

3.4 Ethical considerations

The sample of participants in this study was fully informed regarding confidentiality, privacy, sensitivity and data protection. A consent form was issued before the interview was conducted.

4. Results

The main aim here is to analyse the data obtained and highlight the attitudes towards e-learning among content administrators and learners at their workplace.

4.1 Quality

As mentioned in the previous section, the interview schema was loosely based on the DeLone & McLean (1992) framework, in which they suggest that e-learning systems can be evaluated using six dimensions: 1) system quality, 2) information quality, 3) usage, 4) user satisfaction, 5) individual impact and, 6) organisational impact; and the IS Success Model consisting of 1) system quality, 2) service quality, 3) usage, 4) user satisfaction, 5) net benefits (DeLone & McLean, 2003); also, according to Wang et al. (2007), who suggest that e-learning systems can be evaluated using six dimensions: 1) information quality, 2) system quality, 3) service quality, 4) system use, 5) user satisfaction, and 6) net benefit.

4.1.1 Information quality

According to the data received, the knowledge of learners is at a high level. All participants said that "through e-learning, we received enough information for our work and it was easy to understand and up-to-date." Moreover, most of the participants agreed that the platform was used in an appropriate way in connection with the presentation of content. However, respondent G highlighted the point that "within the statutory training related to rules or laws, especially occupational safety and health and fire safety, the content includes too much information regarding the performance of job duties." Interestingly, participant H does not perceive e-learning as a full-valued platform, but only as an educational supplement applicable to certain topics. A good and sufficient flow of information can also be recognised because more than 80% of the participants in this group were not interested in learning any further and acquiring more information. The only participant who did not agree with this view was participant F, who was interested in certain specific topics. More specifically, respondent F mentioned having "passed the company's code of ethics". The majority of participants said that "the amount of information in the e-course was adequate." The only dissatisfied participant in this regard was participant G, who expressed the view that "there was too much information in the e-course." We conclude from this that the participants are learning and not only focusing on the content. But they are focusing on the main goal, namely passing the e-course as this is mandatory (the workforce has to do it, because it is a rule or a law) instead of perceiving e-learning as a tool for improving their personal development.

During the interviews, the content administrators revealed that the information for e-courses comes from legal and internal regulations and guidelines. They follow the same content creation rule as in traditional classroom education. Nevertheless, it is noticeable that the content related to the practical part is partially limited within the process moderation. Why is this so? Some practical content is not suitable for adding to e-content, and this problem is largely solved by adding images, animations or an external link with video demonstrations. In the case of restrictions, participant A stated further that "the restriction itself lies in the application of e-learning only to selected training."

The organisation offers traditional classroom education too, especially for the workforce in production. Participant B clarified this by saying that "within the framework of individualisation, certain consultations took place, especially with employees from other departments." Based on their knowledge, there is no problem with understanding the content. As for the timeliness of the information on the platform, it is interesting to note that the e-learning platform manages to do part of this work on its own ("and they do this by transferring data to the organisation's records where the courses are stored in their final versions and a record is kept of their expiry dates," participant A said, "and manual updates are carried out regularly every year or whenever the legislation is amended.")

4.1.2 System quality

All learners rated the system as of good quality and easy to use. However, the interactivity of the e-courses varied. Three learners (D, F, H) thought that the tests were not interactive enough and would appreciate greater variety, especially more games and tests. The rest of the respondents among the learners agreed there should be less utilisation of interactive elements, but at the same time they considered them to be sufficient. Only one participant, namely E, was against the game elements. The same tendency occurred in relation to the audio-visual material, where half of the interviewed participants (C, D, F) would like to hear/see more sound recordings, videos, images, etc. while the rest regarded the use of audio-visual material as sufficient. In terms of tailoring the e-learning to suit their personal needs better, for example to omit familiar information and data, the majority of the participants said they were not in favour of this. "I like to remember familiar things," participants G and H said. The youngest respondent, F, wished "to skip already familiar topics".

Two years before the introduction of the online platform, the implementation of the system started with a three-round tender with specific requirements regarding the quality of the system. A single candidate succeeded. This resulted in the introduction of the provider's own solutions for some courses, while several departments of the company collaborated in further developments (IT, HR, management and union associations). The quality of the system was discussed at various team meetings. The main emphasis was the graphic part. The sound was not taken into account due to the absence of the necessary technology. Some of the gamification elements were utilised. Traditional tools such as phone and email were not employed, but, as participants A and B said, "a discussion forum between learners and instructors is possible."

4.1.3 Service quality

It was found that in the organisation surveyed, there is a high level of support for and management of the utilisation of e-learning, both in terms of adaptivity and personalisation, as well as in terms of synchronous communication and technical availability of content and help. As far as the content administrators are concerned, respondent B said that "learners have all the support from the IT, HR and security departments." It is not necessary to implement virtual guides, but "there is some idea of the inclusion of these elements", participant B said. This means that all users already have sufficient digital skills. As respondent A affirmed: "there is no particular need for it now."

4.2 E-learning

In terms of the interview responses, when implementing e-learning, the following factors need to be considered: a) analyse whether e-learning would suit the organisation; b) develop detailed plans to identify what kind of resources and efforts would be needed to implement e-learning; c) be prepared to adapt existing training practices to be more appropriate for e-learning; and d) decide on the time aspect.

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4.2.1 System usage

The data obtained demonstrated that the process of planning and preparing for e-learning works properly because all learners were able to pass the e-course on time. According to the content administrators, the reason for the good planning and implementation process is the fact that the content of the training is usually governed by internal guidelines and legislative conditions, and therefore the employee always undergoes training before starting work. Not surprisingly, the time spent on e-learning in order to complete the course varied from a few minutes to several hours, according to the learners' responses. We believe that this depends on the type of e-course and the complexity of the issues. This simply means that the actual time required for passing the e-course depends on the specific course. Almost all participants in this study group, except learner F, stated that they go back to check and evaluate their responses. Four (C, D, F, G) out of six participants found it beneficial to repeat the information gained after a certain period of time.

In the interviewed organisation, some of the e-courses are mandatory for some employees. Additionally, content administrator B stated that "e-learning is set up for technical and professional workers; administration and manual workers in production are still educated in the traditional way, namely face-to-face." We believe that the production workers do not have sufficient digital skills and time to use the platform, and the implementation of e-learning would result in various risks (e.g. health and safety risks, it is time-consuming and financially demanding) and has no benefits. However, we see great potential for e-learning for this workforce because of the benefits of cost and time reduction when it has enough digital skills. The education system in this organisation operates smoothly, issues certificates, announces the results of the tests and keeps a check on the expiry dates of the current certificates. In short, it improves the efficiency of the education system.

4.3 Evaluation

It is well-known that different people have different learning styles and needs. This simply means that e-learning may not work effectively for everyone. This section discusses the advantages and disadvantages of e-learning. When participants were asked about the main advantages and disadvantages of e-learning, the learners' answers were rather mixed as they held various views. It is crucial to evaluate its effects on both levels, the individual and the organisational. To see if the advantages dominate over the disadvantages and to check for potential areas of improvement, it is necessary to monitor the progress and success of individual orientation. An analysis at the organisational level is necessary, as not all the pros and cons of e-learning will be apparent on the individual level alone.

4.3.1 Satisfaction

Not surprisingly, all learners had a very positive perception of e-learning, especially in terms of efficiency and flexibility; more precisely in terms of low costs (D), time (C, D, E, F) and individual approaches (E, F, G). But respondent H stressed that "I perceive e-learning positively, but it is necessary that the learner should already have some knowledge of the topic and needs to repeat/update it." All of them seem to be satisfied with the possibilities of e-learning. Learner C in particular referred to "personal satisfaction due to lower time requirements compared to classroom teaching".

In the period of implementation, pre-satisfaction surveys took place with a 70% positive feedback rate, as confirmed by both content administrators. Only small changes had been made based on the survey satisfaction data, leading to a more individual approach. Along with the survey, there is always the possibility of resolving any issue. "The issue is promptly resolved by the HR," respondent A confirmed.

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4.3.2 Advantages and disadvantages

Asking learners about the three biggest advantages of e-learning provided very similar views. One advantage that was highlighted by the users was the flexibility, particularly in the education process, individual approach, practical use and distribution of teaching material. This ensures that all learners can also contribute to and receive from the e-learning. All learners expressed this as follows: "I prefer e-learning whenever it suits me and when I like to do it." Almost all of them (C, D, F, G and H) agreed that e-learning saves company costs. Respondent C further viewed "e-learning as motivational, where the learner is forced to be more focused on learning." The practical benefits of e-learning, according to the respondents, were recognised by working better at the workplace. Participant H explained this as follows: "the information I learnt I implemented in the internal regulations."

Most of the learners had issues with the need to create a good and interactive programme requiring mutual contact, for example having the possibility of submitting additional questions, having additional time, acquiring digital skills and having an individual approach. Respondents E and F mentioned that "the e-learning platform must be adapted to each individual due to their special needs, especially because of the possible lack of digital literacy." This means that the organisation must make an effort to create effective e-learning to improve its current familiarisation process. Another disadvantage was the absence of human interaction, according to respondents A, B, C, D, F and G.

The data obtained in the group of content administrators were mostly identical to the results of the learners, namely flexibility (time, individual approach, distribution of study materials), company cost savings and employee motivation. Respondent B explained that "e-learning eliminates the problem of motivation and lack of interaction, because learners are more focused in the platform environment than in the classroom teaching environment." Not surprisingly, participation in e-learning is "100%, due to the absence of the need to be present," respondent B explained. In terms of the codification of the contents, administrator A stated that "in the case of legislative and other changes, the existing e-course can easily be modified, and learners will be sent a request to complete the course". Both respondents agreed that e-learning utilisation has an impact on competitiveness, particularly in the area of employee training and the streamlining of certain processes. Moreover, they agreed that e-learning also helps to achieve the organisation's strategic goals. As respondent B specified, "the e-platform helps to assess the fulfilment of the stated goals," and respondent A agreed because "without passed courses, employees would not be able to work and perform the required tasks set by legislation." We observed the time saved by e-learning in the learning process, which participant B said was confirmed by "the results of the internal satisfaction questionnaire". But we suspect that this measure was not accurate.

In the case of the disadvantages of e-learning, the group of administrators agreed with the learners' statements. However, a very important issue was pointed out by participant B, namely the place of "e-training in health and safety, fire protection and other unresolved issues in relation to approval under state professional supervision". The problem is that e-learning is not incorporated in legislation.

4.3.3 Future and trends

Generally, all participants regarded e-learning very positively. Learners D, F and H referred to e-learning as "a better form of education". Respondent G would prefer blended learning. During the interviews, it was observed that none of the learners had experience with pre-work onboarding. This means having the opportunity to get to know one another before starting the work, to get acquainted with the culture or structure of the company and the working documentation, processes, etc. We think this depends on the length of time of respondents' employment. The average age (48) of the sample is relatively high; this trend did not exist before and still does not exist in the interviewed organisation. Only respondent E was against pre-work onboarding. No one in the learners' group

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proposed any improvement in their e-learning. "No idea," said respondent F. Respondent D thought that "in our organisation there is no value connected to expanding e-learning opportunities." E-learning usually works on computers and laptops, but it is also possible to create mobile learning (m-learning). Interestingly, C, E, F, G, H agreed with further development of e-learning, e.g. m-learning (whenever and wherever).

Respondent B noted that "success is achieved by those organisation managements that are prepared to redesign and renew their education system by taking into account the high-tech and financial capabilities of the company and building a team to implement it." In the interviewed organisation, no specific future development plans were found. However as B indicated, "there is a desire and intention to introduce some specific trends." This depends on the development of the issue and the modern technological level of the organisation. B wished for more "modern trends in virtual reality tools" in e-learning of occupational safety and health and fire safety training. Both respondents agreed that the dominant trend will be the cloud and mobile-learning.

5. Discussion

> ➤ RQ1: Why have organisations implemented workplace e-learning?

According to the data received, workplace e-learning can increase efficiency, maximise productivity, decrease costs and provide flexibility. The aim of workplace e-learning is to promote and change current production (Victor & Boynton, 1998), to match the business situation (Edmonds, 2004) and to focus on the need to know (Devlin, 1993). In the interviewed organisation, work-relevant content became important. According to the data obtained during the interviews, advantages outweigh the disadvantages, and therefore organisations prefer e-learning. Subramaniam & Nakkeeran (2019) stated that companies implement e-learning in the workplace to increase staff performance. This is in line with the data obtained in this study.

Is e-learning effective? In which contexts? For which groups of learners? It is well known that different people have different learning styles and needs. This simply means that e-learning may not work effectively for everyone. Not surprisingly, all learners perceived e-learning very positively, especially in terms of efficiency and flexibility, more precisely in terms of low costs (D), time (C, D, E, F) and individual approaches (E, F, G). Content administrator B stated that "e-learning is set up for technical and professional workers; administration and manual workers in production are still educated in the traditional way, namely face-to-face." This is in the vein of Vernau & Hauptmann's (2014, p. 5) statement that showing consideration and reaction to requirements, expectations, and needs on the micro-level is as important as on the macro-level. Schools and universities, but also companies and administrations, are challenged when it comes to developing new organisational designs that enable various types of flexibility (IFO, 2017), which is similar to flexibility in the interviewed organisation.

> ➤ RQ2: How do users perceive and use the e-learning system within the organisation?

All the interviewed participants perceived e-learning very positively, mainly due to its flexibility, simple utilisation and efficiency. But respondent H stressed that "I perceive e-learning positively, but it is necessary that the learner should already have some knowledge of the topic and needs to repeat/update it." All of them seem to be satisfied with the e-learning possibilities. Especially learner C referred to "personal satisfaction due to lower time requirements compared to classroom teaching". All in all, our respondents rated e-learning much more positively than Beinicke & Bipp's (2018) respondents, who rated e-learning as effective as traditional classroom teaching. Is e-learning effective and flexible? According to the previously mentioned satisfaction questionnaire from this organisation, it seems to be both effective and flexible. According to the learners, the information they obtain through e-learning is current and sufficient for the performance of their work. This is comparable to Kokoç's (2019) findings, which demonstrate that the perceived flexibility of time and the perceived flexibility regarding the content have significant positive effects on behavioural engagement and academic performance. But this is in contrast with Kokoç's (2019) findings that,

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surprisingly, the perceived flexibility of teacher contact is not significantly affected. This is important because most of the learners had issues with the need to create a good interactive programme requiring mutual contact, for example that it should be possible to submit additional questions, have more time, acquire digital skills and enjoy individual attention.

➢ RQ3: What are the advantages and disadvantages of workplace e-learning?

An important advantage of e-learning is that it creates more flexibility, particularly in terms of the educational process, individual approach, practical use and the distribution of teaching material. This is in accordance with Davis & Kleiner (2001), who emphasised flexibility as a benefit. This is also similar to Derouin et al. (2005), who confirmed the flexibility of learning using web-based tools. Identically, Wang et al. (2007) highlighted the point that e-learning makes learning more independent and convenient. The respondents concluded as follows: "I prefer e-learning whenever it suits me and when I like to do it." Almost all the learners (C, D, F, G and H) agreed that e-learning saves company costs, as Welsh et al. (2003), Derouin et al. (2005) and Wang et al. (2007) also do. But considering the cost of implementing e-learning at the workplace, is there a positive return on the investment? According to the respondents' data and Ozkan et al. (2009), e-learning became important because of its convenience, reduction of costs and flexibility.

The disadvantages of e-learning, according to the empirical analysis, are 1) the need to create a good and interactive programme requiring mutual contact, for example having the possibility of submitting additional questions, having more time, acquiring digital skills and individual attention; and 2) the absence of human interaction, according to respondents A, B, C, D, F, G, H. This is in agreement with Antonacopoulou & Güttel (2010), who stated that successful orientation requires interaction and communication, and with Falconer (2006), who emphasised interaction as important for learning.

➢ RQ4: What needs, factors and trends have to be taken into consideration in the future?

Learners D, F and H called e-learning "a better form of education". Respondent G would prefer blended learning. These data confirm that learner satisfaction and the objective of continuing to use e-learning in the future are essential elements of system success (Chiu et al. 2007).

During the interviews, it was observed that none of the learners had experience with pre-work onboarding. It is recognised that onboarding helps a new workforce to adjust to the social and performance aspects of its jobs so that it can quickly become productive (Bauer, 2010). We think that this depends on the period of employment of the respondents. The average age (48) of the sample is relatively high, and this trend did not exist before and still does not exist in the interviewed organisation.

Mobile learning is increasing as wireless training becomes more and more accessible (Welsh et al., 2003, p. 248). In the Czech Republic, there were 14.81 million mobile connections in January 2021 (Kemp, 2021). Interestingly, C, E, F, G, H agreed with the further development of e-learning, e.g. m-learning (whenever and wherever). Respondents A and B agreed that a dominant trend will also be the cloud.

Respondent B noted that "success is achieved by those organisation managements that are prepared to redesign and renew their education system by taking into account the high-tech and financial capabilities of the company and building a team to implement it." Król (2016) recognised e-learning as one of the innovative training methods. This is in the vein of Romiszowski's (2008, p. 13) explanation that the factors that most strongly impact on the ultimate success or failure of an e-learning project are somewhat related to the technologies used and the technicalities of designing courses for these technologies. They have much more to do with the broader and more general factors that impact on the success or failure of any innovation in the context of human-activity systems - education and training systems are prime examples, but the principles are far more generally applicable.

The data obtained from the interviews confirm Rajeh et al.'s (2021) statement that e-learning might be the future of education.

6. Conclusion

This qualitative study aimed to analyse the data obtained and to highlight the attitude towards e-learning among content administrators and learners at their workplace. Developing at work and at the workplace is a constant activity, and organisational activity in e-learning belongs into this process too. This means that workplace e-learning represents a significant burden for an organisation.

The main findings of this study are the following:

➢ the knowledge of learners is at a high level;
➢ the majority of participants said that "the amount of information in the e-course was adequate";
➢ participants are learning and not only focusing on the content, the main goal remains to pass the e-course;
➢ the system is of high quality and is easy to use, however, the interactivity of the e-courses varied;
➢ there is a high level of support and management in the utilisation of e-learning;
➢ the process of planning and preparing for e-learning works properly because all learners were able to pass the e-course on time;
➢ all learners perceived e-learning very positively, especially in terms of efficiency and flexibility, more precisely in terms of low costs, time and individual approaches;
➢ the main advantages are flexibility and productivity;
➢ the main disadvantages are lack of mutual contact and human interaction;
➢ future trends are the rise of e-learning, pre-work onboarding, the cloud and m-learning.

Findings indicate that there will be a steady, but notable, increase in workplace e-learning to enhance all training methods at work.

Generally, there are various pros and cons that can be identified in relation to workplace e-learning. In the case of the organisation, there was/is an outside partner that aids the organisation in developing its own e-learning platform. The pros and cons were analysed. All in all, e-learning is a good way to conduct parts of the necessary education, but it is not yet suitable for the entire education process, because some aspects performed better in traditional face-to-face training. Blended learning is preferable, and as technology develops, more and more tools are being developed that can be used in supporting the e-learning process in more comprehensive ways, especially m-learning. The only remaining question is how to take advantage of this to meet the organisation's training and development needs. And the short answer to this is by thinking outside the course.

However, the fact that the views of only two groups (content administrators and learners) are presented - the managers' perspective was not taken into account - represents a limitation in the research. A further limitation of the study is the interview group, which is quite heterogeneous (different ages, expertise, departments and work duties) and being based on a single case study with a small sample size.

More theoretical and empirical research into this subject is needed. A future research topic could be to compare the experiences of face-to-face-learning, e-learning and m-learning in order to determine which method is preferable and what the nature of the differences between these types of learning are. Once it is clear which is the most successful learning method, the focus of the research could be to explore the best means of introducing it into organisations.

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