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Faculty of Economics and Management

Department of Languages

Bachelor Thesis

Corporate e-learning, its Benefits and Challenges in McKinsey&Company

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Objectives of thesis

The objective is to identify the essence of the corporate e-learning training system and its critical impact on corporate business and to consider the possibilities of e-learning improvement in a selected company.

Methodology

The theoretical part will concern the research of secondary sources of the theoretical foundations of e-learning.

The practical part of the methodology will consist in questionnaires surveys.

Quantitative research of the methodology will be used for data collection and statistical analysis which will demonstrate the historical and essential e-learning statistics taken from reality.

The proposed extent of the thesis

30 – 40 pages

Keywords

E-learning, internet, LMS platform, skills, online, education, change, resources.

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Declaration

I declare that I have worked on my bachelor thesis titled *"Corporate e-learnings, its Benefits and Challenges in McKinsey&Company"* by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.03.2024 _____

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Corporate E-Learning, its Benefits and Challenges in McKinsey&Company

Abstract

The bachelor thesis delves into an examination of McKinsey and Company's e-learning system, focusing on a sample of employees from the Prague headquarters. The study aimed to identify factors influencing varied perceptions of the e-learning system and satisfaction levels among individuals. Notably, gender emerged as a significant determinant, revealing a more positive attitude among male respondents. The findings suggest the need for a broader analysis, advocating for a larger sample that encompasses diverse cultural backgrounds within the European Union. This expanded approach could shed light on cultural influences, aligning with Geert Hofstede's framework on cultural dimensions. The thesis concludes with a recommendation for McKinsey and Company to invest further in enhancing their e-learning system. Such improvements are envisioned to foster organizational success, enabling growth beyond existing boundaries and regions. The thesis encourages ongoing development to ensure the continued efficacy and positive impact of the e-learning system on the company's overall performance.

Keywords: E-learning, Internet, LMS platform, skills, online, education, change, resources

Firemní e-learning, jeho výhody a výzvy v McKinsey and Company

Abstrakt

Bakalářská práce se zabývá zkoumáním e-learningového systému společnosti McKinsey and Company se zaměřením na vzorek zaměstnanců z pražské centrály. Cílem studie bylo identifikovat faktory ovlivňující různé vnímání e-learningového systému a úrovně spokojenosti jednotlivců. Zejména, pohlaví se ukázalo jako významný determinant, odhalující pozitivnější přístup mezi mužskými respondenty. Zjištění naznačují potřebu širší analýzy, obhajující větší vzorek, který zahrnuje rozmanité kulturní zázemí v Evropské unii. Tento rozšířený přístup by mohl osvětlit kulturní vlivy a sladit se s rámcem Geerta Hofstedeho o kulturních dimenzích. Práce je zakončena doporučením společnosti McKinsey and Company, aby dále investovala do zdokonalování svého e-learningového systému. Předpokládá se, že taková zlepšení podpoří organizační úspěch a umožní růst za stávající hranice a regiony. Práce podporuje neustálý vývoj, aby byla zajištěna trvalá účinnost a pozitivní dopad e-learningového systému na celkovou výkonnost společnosti.

Klíčová slova: E-learning, internet, platforma LMS, dovednosti, online, vzdělávání, změna, zdroje

Table of content

1 Introduction

This thesis examines the domain of corporate e-learning, investigating its capacity to improve knowledge acquisition, skill development, and employee engagement inside firms. The analysis focuses particularly on McKinsey and Company. The study seeks to emphasize the transformative capacity and practical obstacles linked to the integration of e-learning into this dynamic and high-achieving consulting firm.

The theoretical framework incorporates fundamental ideas such the definition and historical context of e-learning, the PLATO principles for optimal design, diverse e-learning technologies, and the impacts of e-learning implementation at both individual and societal levels. A hybrid research methodology is employed. An extensive literature review investigates the current body of research on corporate e-learning, while a detailed analysis is offered by a McKinsey case study. This case study utilizes secondary data analysis, employee surveys, and expert interviews to provide a comprehensive understanding of the firm's culture and learning environment.

The practical component delves into the realm of McKinsey, examining its historical background, present progress, and requirements for training. The case study provides a comprehensive description of the precise research methodology employed, encompassing sample techniques, survey formulation, and data gathering protocols. An examination of data, encompassing both quantitative and qualitative aspects, provides a comprehensive understanding of the influence of e-learning at McKinsey.

2 Objectives and Methodology

2.1 Objectives

The objective is to identify the essence of the corporate e-learning training system and its critical impact on corporate business and to consider the possibilities of e-learning improvement in a selected company (McKinsey and Company).

2.2 Methodology

The theoretical part concerns the research of secondary sources of the theoretical foundations of e-learning. The practical part of the methodology consists of questionnaires surveys. Quantitative research of the methodology is used for data collection and statistical analysis which demonstrate the historical and essential e-learning statistics taken from reality.

The methodology is based on the implementation of statistical methods of hypothesis testing applied to the primary data collected via a questionnaire distributed online. Furthermore, the application used for processing data is Jamovi.

3 Literature Review

3.1 E-Learning

3.1.1 Concept and background

E-learning (Electronic Learning) is also known as distant education or e-learning. The UNESCO experts' definition of "*e-learning*" is "*learning with the aid of the Internet and multimedia*"(Chatelier, 2005). Even with a clear meaning, the phrases "*distant education*" and "*e-learning*" are frequently used interchangeably. Despite some similarities, they differ fundamentally. In contrast to face-to-face instruction, the main characteristic of distance learning is the communication between the teacher and the student that is used to transmit educational materials. The World Wide Web, radio broadcasts, the postal service, or any other form of communication could be the medium (Frolova et al., 2021, p. 7002). The idea of e-learning education is fundamentally based on the capacity for remote learning. The e-learning experience is fundamentally dependent on multimedia formats including audio, video, interactive quizzes, simulations, and other tools. Not merely online, e-learning can occur in a variety of venues; for instance, in-person classes using the same course materials are also included in this category (Andrews and Haythornthwaite, 2007, p. 101).

As an integrated learning paradigm, e-learning combines the traditional learning model with all the possibilities offered by contemporary technologies. To establish new interactive learning models that can benefit from new learning possibilities by utilising information and communication technology, traditional learning models must be modified. Education is one of the many areas of human lives where progress is ongoing. But even though everything is only getting started, there are still a lot of issues and questions around the usage of e-learning technologies that need to be resolved (Frăsineanu* and Ilie, 2019). However, e-learning enables the implementation of two fundamental tenets of contemporary education: "*education for all*" and "*education throughout life*". Nevertheless, must keep in mind that this technology requires careful development, very high-level material preparation, and a deliberate approach (Ivanova, 2020, p. 235).

The flexibility with which students can access content and educational resources at any time and from any location is one of the key features of online learning. These

programmes allow students who reside in isolated or remote places to continue their education without having to leave their institution of higher learning. The most typical resources that boost engagement and, hence, learning motivation are:

- Online discussion boards, where students can share knowledge on subjects.
- Mailing lists and chat rooms: they make communication easier (Jennings, 2006, p. 18).

These methods and techniques are frequently used together to implement the e-learning process today. This approach to education is known as blended learning and mixes e-learning with other conventional forms of instruction. It combines the adaptability of modern tools with the functionality of traditional ones (Tayebinik and Puteh, 2013, 106)). Such interactive online learning's instructional value helps:

- Improving the assimilation of necessary learning materials by fusing together various viewpoints, facts, and concepts.
- The growth of metacognitive skills via networked collaboration.
- Encouraging pupils to utilise fresh approaches to problem-solving because of their network's cooperation.
- Development of social skills essential to teamwork (Goodyear, 2005, p. 85).

According to Allan, tools that are utilised in the interaction are already mediated during the training phase. Blended learning, which refers to the combination of in-person and online learning, is just one characteristic of this new approach to education (Allan, 2007, p. 148):

- Conventional face-to-face meetings, particularly for lengthy and intricate training programmes.
- Using the Internet as a tool for collaboration and information transfer.

The appropriate integration of these two models requires the usage of both the individual and the collaborative learning models. There are individual and group learning moments in e-learning, just like in traditional learning (Catherall, 2005, p. 39).

E-learning is a practical and useful way of education, as experience has shown. The advantages of e-learning include:

- Personalized instruction.
- Choosing from among the several training programmes.
- Independent scheduling of the location, time, and length of classes.
- Independence from the student's and the educational institution's physical and chronological location allows one to not restrict one's own educational needs.
- Implementing feedback between the teacher and students effectively, etc (Somayeh, 2016, p. 87).

Although e-learning technology has many extra advantages, it shouldn't totally replace in-person training, though it can effectively supplement it. Despite all its benefits, this technique has several drawbacks:

- There is a lack of study motivation; hence, tighter management is needed.
- Lack of organisational skills; the teacher must establish a detailed training plan.
- The requirement for full-time testing of knowledge, etc (Clark and Mayer, 2003, p. 218).

However, since this method has now come to be one of the most significant, it is also required to provide a thorough explanation of the background and development of this style of learning and information gathering (Melling, 2005, p. 15). The advancement and accessibility of the educational system have been considerably aided by e-learning. E-learning is currently expanding quickly on a global scale. The three countries still in the forefront of e-learning development are the USA, South Korea, and Western Europe. While a commercial system is already in place in the United States, state subsidies are the primary reason that the education industry is growing in European nations (Nagy, 2005, p. 82). The industry in these areas is substantially developed, thus their market growth rates — 8% in North America and 13% in Western Europe—are modest. While in emerging markets, growth rates in Asia are 32.6%, Eastern Europe is 22%, and Latin America is 18.9% (Goyal, 2012, p. 245).

Technology that enables e-learning is primarily at the core of it. Technology-related standards aid in regulating the wide range of these technologies. With the use of such

standards, it is possible to control how different E-Learning (EL) system components interact, compel manufacturers and developers to adhere to the standard's level of performance, and guarantee the delivery of high-quality services. But because EL is evolving so quickly, norms inevitably fall out of date very quickly. Although e-learning is still a relatively new method of instruction, it has already made remarkable progress (Ehlers and Pawlowski, 2006, p. 311).

The history of e-learning is shown schematically in figure 1, where the e-learning presentation forms are shown on a timeline (years are approximate).

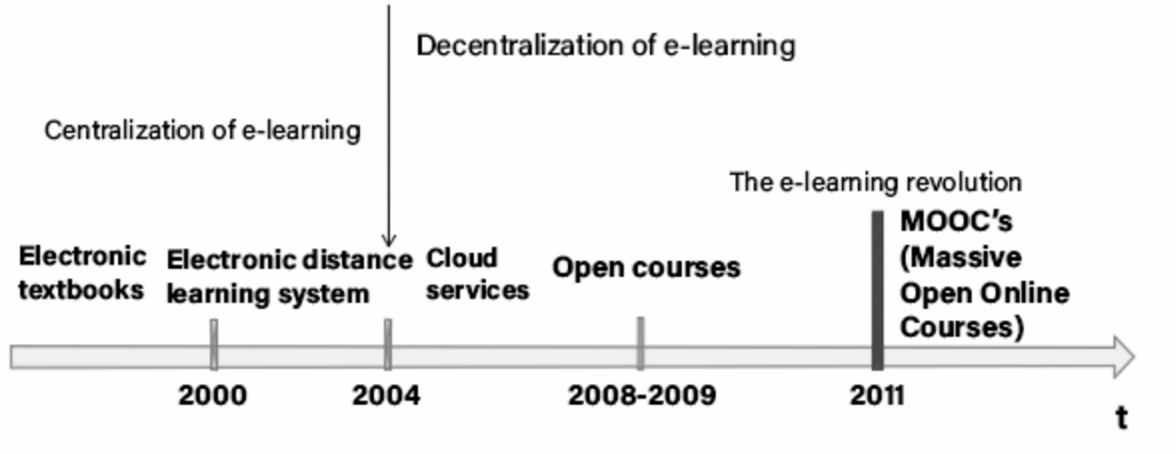

Figure 1. Stages of development of e-learning, Source: Aparicio, 2016.

As a result, there are several key phases that may be identified, each of which will have a distinct e-learning presentation format, technology requirements, and learning development characteristics. When new standards are required, they are produced. As a result, when a new type of e-learning emerges, a standard also does (Ehlers and Pawlowski, 2006, p. 450). Therefore, it is intriguing to explore how standards controlling technological norms of interaction and data transfer are being developed concurrently with e-learning forms. The history of EL development has gone through four significant phases and for examination each of them in more detail while attempting to follow the evolution of standards and focus on the EL forms for which they were created because there are numerous versions and revisions of technological standards (Bezovski and Poorani, 2016, p. 55).

E-learning, which dates to the invention of the mail and allowed teachers to send pupils learning materials for independent study, provided the groundwork for e-learning. According to Campbell-Kelly, personal computers and the first electronic textbooks first appeared at the start of the 1990s (Campbell-Kelly et al., 2023). This period can be seen as the beginning of the EE development process, which is defined by the active use of presentations and testing software, the creation of electronic textbooks, and the simplicity with which educational resources can be distributed (Kazanskaya, 2008, p. 3).

In the same year, 1993, the international organisation AICC publishes the "*CMI001 - Guidelines for Interoperability*" specification. It outlined the conditions necessary for instructional materials to work with a computer-based learning management system. These were the original laws governing online education. Naturally, there was no discussion of any Web-interaction in this situation; instead, communication was limited to reading and writing local files. As the Internet era and e-education became more popular in the late 1990s, several departments and teachers began to apply their own solutions (GURI-ROSENBLIT 2005). At first, these were straightforward learning websites. The AICC had to release a new version of the specification CMI001 v 2.0 in 1998 after becoming aware of such a shift in the field of e-learning (Clark and Mayer, 2003, p. 217). Naturally, the previous version served as the foundation for this definition, but there were additions made in the form of regulating the guidelines for communication using the HTTP protocol. However, the association's work did not end there. A year later, in September 1999, the AICC published CMI001 v 3.0, the third edition, which also outlined the guidelines for interaction with the Java script API. As a result, the creator of educational materials is only permitted to make straightforward calls to Java Script functions rather than direct HTTP sends, which requires additional understanding (BATARFI et al. 2011).

Since using e-learning to train personnel saves money, businesses were the first to adopt it. Commercial products that incorporated common services like text forums, role-playing games, and navigation subsequently emerged. The first Virtual Learning Environments (VLE) were those. Therefore, corporate learning can be used to describe the second stage of e-learning growth (Faherty, 2003, p. 8). Electronic educational resources (computer simulators, installations with remote access, etc.), learning tools, organisation, and support of the educational process, various models of e-learning management, and

approaches to assess the quality and effectiveness of EE are all currently being developed (Mozhaeva, 2013, p. 129).

In terms of educational information technologies, centralization is starting. Learning Management Systems, sometimes known as LMS, are software programmes that address all the issues associated with e-learning, including content management, educational material delivery, testing, interactive support for the learning environment, knowledge management, and learning management. As a result of this pattern, a new standard starts to emerge. In 1999, the ADL (Advanced Distributed Learning) initiative group started working on SCORM. Versions 1.0 and 1.1 were not released and were used for testing and feedback collection; this standard is based on the CMI001 specification version 3.0. In 2001, the first version of the SCORM v 1.2 standard was issued and started to be actively circulated (Barker, 2004, p. 23).

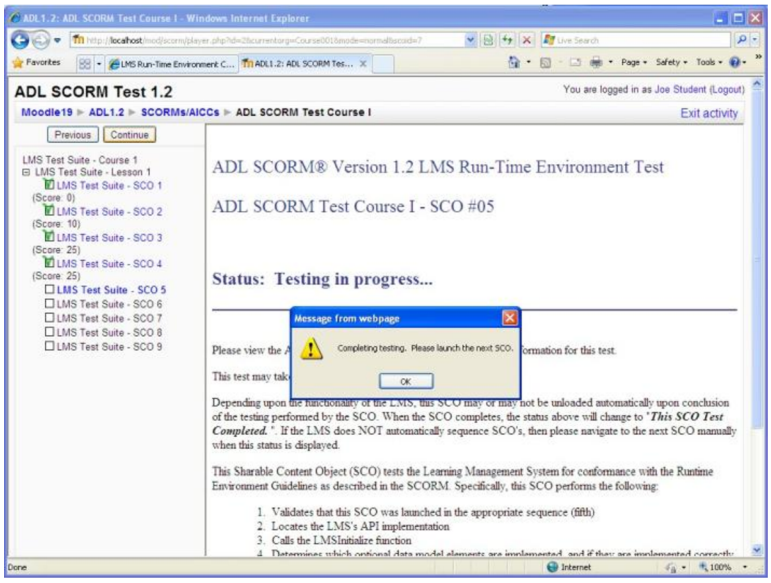

Figure 2. SCORM v1.2, Source: Moodle, 2012.

The standard specifies the requirements for how instructional materials and e-learning platforms must be set up. E-learning standards were actively developed for a considerable amount of time between 2000 and 2004. The IMS organisation launched the IMS Global Learning Consortium initiative in 1997 with the specific goal of developing learning standards for institutions of higher learning. In 2000, IMS QTI (Question and Test Interoperability) was released (Griffiths and Fabra, 2006, p. 11). As part of IMS' systematic

approach to standardising e-learning, each area of interaction between the learner, instructional materials, and learning management system is described in a separate document. The IMS QTI standard describes data models, test and question design principles, and the results that occur after a user answers a test or question. This standard is the first of its kind. The idea for such a standard came from the realisation that creating high-quality questions and grading them is a distinct and important job. An open test exchange between testing platforms, tools for developing instructional content, etc. is made possible by a standard like this. There are two primary components of the standard: ASI and QTI Results Reporting (or QTI Reports), which specify the format for documenting results (Assessment, Section, Item - the core structural elements of the test). The exam's questions and their arrangement are described by ASI. In two years, the standard was improved upon and polished (Piotrowski, 2011, p. 64).

The text was finally published in 2002 in version 1.2, which proved to be the most popular and widely distributed of the earlier iterations (Schinov, 2014, p. 7). Many of this organization's specifications can now be found in other standards thanks to the systematic process used in the development of the IMS standard. ADL should have included requirements for describing metadata and how learning materials are packaged in their specification to facilitate the portability and accessibility of learning materials. The IMS Learning Resources MetaData (IMS MD) and IMS Content Packaging (IMS CP) specifications, which are now included in the SCORM CAM (Content Aggregation Model) specification as the SCORM Meta-Data and SCORM Content Packaging sections, were created in collaboration with the IMS Global organisation. In the latter, several unique elements extracted from AICC CMI001 have been added to the IMS CP specification (Queirós and Leal, 2013, p. 435).

Another standard, IEEE 1484.12.1, sometimes known as LOM, was released in 2002. (Learning Object Metadata). IMS, Ariadne, and IEEE LTSC, three renowned global standards bodies, collaborated to create him. The IMS MD (IMS Learning Resources Meta-Data) specification serves as the foundation for this standard. The description of training courses is under the purview of the IEEE LOM standard, which governs the metadata of educational objects (Cebeci et al., 2009, p. 109). In 2004, e-learning had spread widely, and the centralised process had already started. More and more solutions are available to

facilitate e-learning. E-learning systems had to be centralised, which prompted the coordination of pre-existing systems to produce a single environment that was maintained and administered centrally. Systems for managing learning are changing and taking on new shapes. The transition from the simplest copyright software solutions to educational content management systems has been made possible by such systems (Maněna, 2015, p. 13).

LMS (Learning Management System) and LCMS are now the two most popular learning management systems (Learning Content Management System). LMS, or learning management systems, are a high-level, strategic solution for organising, carrying out, and overseeing all learning activities within a business, such as online learning, virtual classrooms, and instructor-led courses (Sejzi and Aris, 2013, p. 218). The primary objective is to replace isolated and disjointed training programmes with systematic techniques for evaluating and raising performance and competence levels throughout the business. The emphasis of LCMS, in contrast, is learning material. It gives writers, designers, and specialists the tools they need to produce educational materials more successfully. The primary commercial challenge facing LCMS is producing the necessary content in the requisite amount of time to satisfy the needs of specific pupils or groups of pupils.

LMS and LCMS are, in essence, complimentary but quite separate systems that are maintained by various people and created to address entirely distinct issues and commercial objectives (Greenberg, 2014). The completion of these development criteria at the start of the twenty-first century took four years. There are several standards that have been created, including SCORM, IMS QTI, IEEE LOM, and many other variations (Jayal and Shepperd, 2007, p. 3).

Traditional education was exposed to EE during its evolution in a number of organisational forms. However, keeping up with the times, EO migrated to social networks and established itself there. Nowadays, training involves a variety of professional communities, social networks (like Twitter), and social services. For instance, Google has created a service called "*GoogleApps for Education*", while Microsoft's Live@edu is another well-liked offering. The third stage of EO growth, which can be termed as the "*cloud*" involves a gradual transition of EO (Islam, 2019, p. 69).

A comparison of the functionality of the two most popular VLE systems, Blackboard and Moodle, with the features provided by the corresponding Microsoft and Google cloud services confirms that it is too early to predict that EO will completely capture social services and move to the "*cloud*" (Scalter, 2010, p. 13). This investigation shown that, with the notable exception of assessment tools, cloud services implement most of the functionalities of a virtual learning environment. Additionally, as educational details were not considered during the initial development of these services, there is no academic history in any cloud application system. Some believe that the leaders in social services will continue to advance their technologies. The move of e-learning to the cloud may be roughly dated to 2008–2009.

The once-popular SCORM standard is now mainly irrelevant because it does not relate to cloud computing. In 2008, LETSI begins a discussion about the revised SCORM 2.0 standard. The new version's specifications were obtained, but no further work was done on it. The developers of SCORM decided to produce a new standard that is tailored exclusively for cloud computing rather than alter the existing one.

As a result, the development of a new standard known as TIN CAN API started. This specification is also known as the Experience API. The interoperability and interaction of various software systems are ensured by this modern e-learning protocol, which also monitors and records all learning activities (De Nies et al., 2015, p. 692). The main change from SCORM is that the new specification now includes a description of the repository of educational records. A cutting-edge technology called LRS can work both on its own and as a part of a learning management system. This particularity allows data to be obtained from any device, server, and application and applies to all modern kinds of e-learning, including gamification, non-formal learning, and mobile learning. Another important feature of the standard is the capacity to learn without Internet access, save data to the device itself, and subsequently communicate this data to LRS. SCORM has long been the most important global e-learning standard, however due to the rapidly growing information technology industry, its demise is inevitable. The transition of EO to the "*cloud*" is still difficult. For a comprehensive shift, cloud service providers' technology must be dramatically improved. For these technologies to gain user trust and quality assurance, they must also advance over time. Massive open online courses, also known as MOOCs, are a recent development in the e-learning industry that has developed in tandem with the expansion of social services.

MOOCs are online courses with different forms that are offered for free. MOOCs were developed specifically to be accessible to everyone. The two categories of these online courses are xMOOCs and cMOOCs (Voudoukis and Pagiatakis, 2022, p. 291).

The first xMOOCs (eXtended Massive Open Online Course) are courses that replicate traditional teaching with lectures, seminars, they are designed to be used in a certain period, they have the function of evaluating the work done. The program for this class of online courses is compiled by the author of the course, and he also determines the goals (results) of the training. Such courses are teacher-oriented, but cMOOCs ('c' stands for connectivist), on the contrary, allow students to study at a convenient time for them, they can set their own study schedule and study the material they are interested in (Nagy, 2005, p. 83). Many leading universities provide free online courses - these are the British Open University, Stanford and Berkeley universities, the University of California, the Massachusetts Institute of Technology, and many others. According to Mozhaeva, one of the most striking examples is the Coursera project, created in 2011, which initially combined the open resources of three major US universities and in less than a year became the best educational site of 2012 according to Time magazine (Mozhaeva, 2013, p. 129).

In the field of e-learning, 2011 will be regarded as the year when important developments took place, and everyone had access to free education. All around Europe use of open educational resources has increased. This is the most popular and quickly developing sort of online learning now, and it enables the problem of widespread, unrestricted access to top-notch training programmes to be solved (BALLESTEROS-SOLA a Magomedova 2023). The European OpenUp Ed project includes Russian universities like MESI, and MESI has developed the website lms.mesi.ru with open educational courses for everyone to utilise. The active efforts being made in Russia to enhance this industry are merely one example. The website was made in conjunction with the Openup ED initiative (Senevirathne et al., 2022, p. 12). The relevant standards that aim to improve the calibre of EE services are updated to consider any advancements made in the e-learning industry. Since many aspects and innovations of a single nation can be disregarded by a larger civilization, as in any fiction, the author of this book should also describe such an innovative programme as PLATO (Scott, 2005, p. 45).

3.2 PLATO

An innovative programme like PLATO is particularly significant, according to businessman Brian Dear, who wrote the book "*The Friendly Orange Glow*" on how PLATO influenced the advancement of technology (Hammerman, 2015, p. 142). The development of this system can be compared to the Wright brothers' decades-earlier invention of the aeroplane because, at the University of Illinois, an online community already existed when the future Internet giants were still in their infancy. This finding is intriguing considering that the PLATO programme was established in 1960 (Alpert, 1970, p. 1585). The project's original objective was to develop a computer that could instruct pupils, and at the time, its developer, Donald Bitzer, was still only 26 years old. Through terminals linked to a shared network and the mainframe, the students communicated with PLATO. Students responded to questions and the system promptly provided feedback. A unique keyboard was made available for navigation, and a TV served as the display (Jenkins, 1976, p. 7).

Figure 3. PLATO computer system, Source: Kroeker, 2010.

Control Data Corporation collaborated with the University of Illinois on a number of projects in the 1970s to commercialize PLATO. The technique thus "*spread*" around the globe. Bitzer recruited high school students to collaborate on the project from a number of

nearby schools in 1973. The laboratory was locked up and only scientists had access, which was rare for the period (Vouk, 1999, p. 676).

System versions III through V utilized the specialized programming language TUTOR. Because of its adaptability and PLATO's capability, it was able to create entertainment software, such as card games and simulations. Throughout the course of the year, students added chats, instant messengers, forums, games, and email to the system. As a result, the system started to be utilized for communication and dating in addition to teaching. For instance, Brian Dear "*met*" his wife over a PLATO discussion. The PLATO IV system supported 960 terminals and made 12,000 hours of educational content available in 1976 (Chapelle, 1983, p. 17). A later iteration of the PLATO V system was released. According to Bitzer, it was mostly PLATO IV using more advanced technology. The system's ability to remind users of major occasions and holidays was another breakthrough. Google did that on the start page earlier. The CDC licensed the PLATO brand and some marketing rights to the newly formed The Roach Organization in 1989 (Bennet, 2011, p. 13). PLATO might have had a different outcome if the CDC had not become "*fixated*" on the project's educational goal. TRO rebranded as PLATO Learning in 2000 and started selling PC courses.

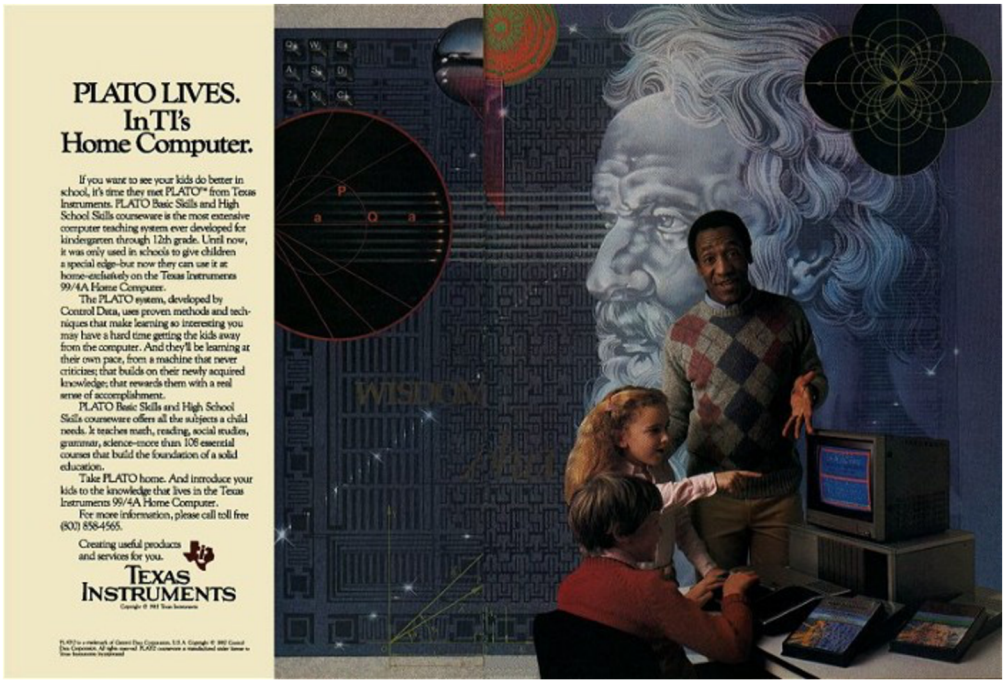

Figure 4. PLATO section in the Texas Journal, Source: Manual, 1982.

On the Cyber1 website, a free software emulator of the original CDC hardware called Desktop Cyber debuted in August 2004. PLATO Learning has been delivering Edmentum learning products since 2012. However, even 50 years later, many of the familiar system such as MOOCs, social networks, chats, and emoticons — retain elements of PLATO (Edwards, 1996, p. 211).

3.2.1 Technologies of E-Learning

E-learning should be analyzed as a learning process on four interconnected levels: theory, practice, and methodology. Although e-learning theory is still in the early stages of development, it is being worked on heavily. A highly updated version of special pedagogy may use pedagogical theory as a foundation, together with components of computer science, programming, and pedagogical measurement theory (Rüth and Kaspar, 2017, p. 98).

At the practical level, e-learning is characterized as a worldwide issue involving the development of software, methodological, pedagogical, and technical complexity that enable learners all over the globe to complete a variety of training courses on their own. The course combines the features of a new textbook, test-style assignments for doing independent work, a reference book, and a mechanism for ongoing and final oversight of the absorption of educational material for each topic covered. Managers can simulate processes and interesting items in courses, build a network of contextual cues and links, and carry out the necessary computations (Noesgaard and Ørngreen, 2015, p. 282).

At the stage where the e-learning technique is being developed, it is important to give more consideration to elements like the precise articulation of the aims and objectives of educational activities. It is essential to improve the findings' measurability and to create procedures for measuring the efficiency and caliber of the technology employed. These challenges will become more crucial in the setting of growing informatization of the educational process (Herrington et al., 2009, p. 167).

Relevant advancements in computer science, technology, programming, pedagogy, pedagogical measures, psychology, and aesthetics are needed at the level of e-learning

approach. Textbooks for online learning start with the requirement for a distinctly reduced and logically organized text, reducing the text into small paragraphs (Woollard, 2011, p. 21). Additionally, it is crucial to plan prompt and efficient assistance for students in case of difficulties, as well as the criteria for the visibility of educational resources, the use of hypertext connections, the organization of a convenient transition from page to page, forward and backward (Stuchlíková, L., 2014, p. 665). The process of setting up electronic or e-learning systems is connected to the organization of e-learning. LMS combines the resources and talents required for planning instruction, observing the learning process, and evaluating outcomes. E-courses, automatic testing platforms, discussion boards and chat rooms, webinars (webinars), and online seminars are the main e-learning resources (Georgouli et al., 2008, p. 231).

The primary information carrier in e-learning is a course. It assists in the distribution of instructional materials to students and allows for the organization of workshops, simulators, and simulations in addition to knowledge testing (ZOUNEK et al. 2016). An e-course is actually just a book in electronic form, but unlike a book, it is interactive and offers the learner the chance to engage with the content and put the skills they have learned into practice (Alenezi, 2020, p. 53).

The intricacy of development determines the various e-course categories. The first option is simple courses, which consist of a straightforward series of slides with basic navigational features and interactive elements (Solovov and Menshikova, 2023, p. 354). They might have slides with tests and fundamental instruction. According to Clark, these courses work best for informing students and for teaching students about straightforward subjects that don't require in-depth explanation. Interactive classes fall under the second category. They are more difficult to create and resemble animated movies the most (R. Clark, 2002, p. 6).

According to Quinn, such courses are typically developed on more complicated subjects where unique visuals and animation are required for a more visual explanation. Games, simulators, and simulator courses are the most challenging. In terms of both appearance and degree of creation complexity, the third type of course is extremely similar to computer games (Quinn, 2005, p. 110). For instance, a manager may design a game that

mimics the duties of a sales representative working at a travel agency. In this game, consumers would ask him a range of questions and he will have to decide what to say and how to say it. When it is crucial to acquire abilities so that as few errors as possible are produced during the actual process, such courses should be developed. They are the most effective despite their complexity in development since they not only provide knowledge but also the most meaningful learning experiences (Wieseke et al., 2009, p. 131).

An automated testing system is the second crucial component of the LMS. The development of test technologies in e-learning makes it possible to guarantee a high level of assimilation of instructional material, the consistency and strength of its study, and a fundamental improvement in the educational process by activating the instructive, controlling, organizing, diagnostic, educational, and motivating functions of tasks in a test form (Jung and Huh, 2019, p. 38). In addition to facilitating autonomous work, forums and chats are designed to facilitate dialogue among listeners. Using a forum necessitates the involvement of a trainer or instructors who ask questions and verify responses, unlike an online course that staff members can complete independently. The discussion board is a great resource for sharpening one's critical thinking skills and learning something essentially complex. Synchronous communication can be done using chat. When talking, everyone must be online at once, which limits how flexible this tool is compared to the forum where any participant can post a response when it's convenient for him (within the deadlines) (Halpern, 2014, p. 46).

The webinar or online seminar is currently one of the most well-liked e-learning resources. In actuality, this is an audio or video conference with a speaker and audience, a presentation, open discussion, and voice and chat communication (Babu, 2020, p. 24). The presenter can be seen if there is a webcam, and some systems allow you to view everyone if there is one. A webinar is practical since it allows you to quickly instruct lots of listeners who are spread out around the globe. Additionally, it is always feasible to record the webinar so that people who could not attend can still access it (or can be viewed again by the participants themselves - for repetition) (Clay, 2012, p. 94).

Currently, many businesses use e-learning to inform and educate both customers and staff. E-learning technology has advanced significantly in the educational system, just like

it has in the business sector. This is partially attributable to its benefits, which include a convenient time and location for studying, high knowledge assimilation, ongoing communication with the teacher, a personalized study program, and time and money savings (Nagy, 2005, p. 88).

The use of remote learning technology (e-learning) by Western European and American countries demonstrates that when high-quality educational content is present in many fields, the efficacy of e-learning is comparable to that of full-time education. The Sloan Consortium estimates that 6 million students participated in online education at American higher education institutions in 2011 (Allen, 2016, p. 18). Due to the low level of computerization in post-Soviet countries, distance education for a long time resembled traditional correspondence education more than the most recent developments in the field of information technology, in contrast to Europe and the United States where it is synonymous with high-tech education.

3.3 Micro and macro effects of E-Learning

Although many corporate decision-makers are aware of the effectiveness of e-learning, few are aware of the potential, almost instantaneous, effects it can have on business profitability. Putting in place a strong e-learning program at any company is a terrific approach to increase profits and, eventually, make the business more competitive.

In actuality, businesses have benefited from e-learning since it was originally developed in the 1960s. Unfortunately, many organizations are either unaware of these potential benefits or are just uninformed about them.

The history and technologies of e-learning were the main topics of the recent review. Therefore, a variety of various areas where e-learning has an impact on job performance should be explored at this point in the work. The following e-learning disciplines are pertinent to the dissertation:

1) corporate e-learning,
2) return on investment (ROI) for e-learning,
3) measuring the relationship between training and job performance,
4) business metrics and evaluation,

5) models of evaluation of training, and
6) e-learning issues.

Insight on how businesses support the e-learning infrastructure, how they view the payback of the training, and how they view bottom-line savings to the company were provided by literature on corporate e-learning and ROI for e-learning. Understanding employee behavior and whether or not trainees apply what they have learned depends on how well training and work performance are correlated. Business metrics and training assessment put a lot of emphasis on the different metrics that businesses use to gauge the effectiveness of their training initiatives (Sally, 2005, p. 37). A few distinct regularly used approaches for training evaluation are highlighted in the section on models for training evaluation. E-learning concerns highlight the fact that this subject is still developing. Any endeavor to increase performance in companies must include evaluation and measurement. The only way to determine whether training is successful in achieving learning, is properly applied by transferring learning to performance, and has the desired impact on organizational results is through this process. Stakeholders, including decision-makers within organizations, are increasingly focusing on evaluation to measure outcomes, especially for pricey training interventions to increase workforce performance (Pulakos, 2015, p. 149).

One of the main obstacles that professionals encounter while enrolling in knowledge enhancement exercises is time, which is closely followed by the second but equally significant obstacle, namely the cost. E-Learning has been offering simple solutions that can be incorporated into the hectic schedules of both employees and businesses, whereas traditional training exercises have been linked to significant time away from the workplace and quite expensive trainer and other documentation expenditures (Mahanta and Ahmed, 2012, p. 22). Other factors that have contributed significantly to the medium's popularity include its ease of access, greater economics, and huge approach. Employees can receive a multitude of specialized training through e-learning, keeping them up to date on the most recent developments in their field. This will eventually benefit the company because the motivated and trained staff members may actively participate in the company's goal, which will increase overall employee engagement. The organization will undoubtedly benefit from these exercises given that the Online Trainings are created to give staff members the most current and pertinent abilities in order to meet the needs of the globalized market. Such

trainings also assist in establishing a culture of learning and help staff members feel important to the growth of the business, both of which have a beneficial impact on staff retention (Goyal, 2012, p. 241).

A relatively recent idea that has grown in popularity in recent years is micro-learning. It is a type of online learning that consists of brief, repeated learning sessions that last only 5 to 10 minutes on average. Micro-learning differs from conventional e-learning in that it emphasizes memory retention rather than knowledge development in learners. As a result, microlearning gives students the chance to develop conceptual understanding and mastery as opposed to just factual knowledge. Although micro-learning has several applications, the majority of them are focused on enterprises and their personnel. They might be used as a refresher course for a particular subject or skill or for training reasons. Teachers that want their pupils to have more opportunities for practice and feedback can also use them in the classroom.

At the other side, the goal of macro-learning, a complicated learning system, is to make learning available to a wide range of students with different ability levels. Students that participate in macro-learning are exposed to a variety of resources that gradually get more sophisticated. This method helps students build their knowledge and skills through relevant and useful activities. The instructor is the one who oversees the lesson and disseminates the information. A coach is a facilitator who helps pupils with their particular problems. A mentor is someone who guides learners in their professional endeavors. In a macro-learning environment, learners play all three of these functions. In addition to having one or more coaches to help them with their specific issues, they typically have mentors who support them in their professional lives.

It is also important to highlight the macro and micro elements of the impact of e-learning on the organization. First, it is necessary to define what boundaries and structures are involved in the organization. E-learning system itself includes macro and micro elements, which, although related to each other, still have their pros and cons. Tables 1 and 2 present the pros and cons of micro and macro-learning, respectively.

Pros	Cons
Frees information from confines of a classroom	Discovery of information may not be the correct one
Information is delivered in bite-sized that takes a very short time to digest	Potential of misunderstanding is quite high as information may be diverted out of context
Doesn't require the need to sit through an entire course to understand about a particular portion	Content might not be accurate due to simplified information

Table 1. Micro-learning, Source: Sun, 2016.

Pros	Cons
Involves instructors, mentors to teach their learners directly	Inflexibility and inability to provide quick access to very specific and time-sensitive information
Makes onboarding easy by giving new hires an overview and grounding in the knowledge and skills they require to do their job	Takes too much time to discover what you are initially searching for
Macro-learning provides an overview and context of an in-depth understanding of a complex and diverse subject	The lack of accessibility as Macro-learning is often held in a classroom or a learning Management System

Table 2. Macro-learning, Source: Sun, 2016.

It's crucial to discuss the trends that are now fundamental to how learning plans are created for all different kinds of businesses. The following e-learning trends have gained traction in recent years and are spreading more widely every year:

The basic goal of **adaptive or personalized learning** is to adapt to each student's abilities, knowledge, skills, and even mood.

Each piece of material for **microlearning** has a time limit of one to fifteen minutes, is focused on the learning objective, and can be broadcast across any platform or device. The student's brain is not overworked with such training, and the course material is retained better.

Development of soft skills, including teamwork, leadership, creativity, responsibility, and critical thinking. The World Economic Forum predicts that 54% of all workers would need retraining by 2022 as a result of the increasing automation of tasks. Professional abilities are becoming less important, and while searching for jobs in the future, soft skills will be crucial.

Gamification is the use of game mechanics that are common in video games for instructional objectives. Gaining "*achievements*" and points encourages personal accomplishments. One thousand Russian employees were polled in 2020, and the results showed that 89% of respondents felt more productive after training that included elements of gamification, 61% always studied in this way, and 33% desired additional gaming chances. However, 61% of the employees who were polled said that studying the usual way was dull (Saleem, 2022).

Virtual reality (VR) is a technologically generated world that communicates with a person through a variety of senses, including sight, sound, touch, and others. The fundamental benefit of VR is the effect of immersion, which occurs when the learner stops feeling like an outsider and starts to view the virtual environment as real.

In order to supplement the information obtained and enhance information perception, **augmented reality (AR)** uses technology to overlay made-up things to real-world feelings. Simply put, photos of the real environment are overlaid with additional information. The ability to recreate amazing processes and phenomena that are physically impractical to accomplish in real life is made feasible by the usage of augmented reality systems in educational activities.

Artificial intelligence is the ability of systems and programs that have been produced artificially to carry out creative tasks that are typically thought to be the domain of man.

Chatbots, which are computer programs that ascertain human wants and then work to meet them, are the most prevalent application of artificial intelligence.

Siri, a digital personal assistant for users of Apple devices, is a classic example of a chatbot. Chatbots can significantly enhance learning, according to Joe Ganci, president of the US-based consultancy and e-learning firm eLearningJoe (Ganci, 2012, p. 140). For instance, oneself may use artificial intelligence to improve the dialogue simulator. Imagine how much more challenging and realistic the chore of managing virtual clients' objections will be.

But it's also critical to recognize those information-delivery strategies that have been utilized consistently over the past 10 years, are more prevalent today, and have already made a name for themselves as being dependable and objectively effective. E-courses, which are thematically finished, structured instructional materials with learning objectives, relevant educational content, and final control mechanisms, are unquestionably one of the keyways. The low cost, ease of development, and high learning effectiveness of courses are the main reasons for their appeal. A good computer and the Internet aren't even necessary for the majority of them.

E-courses are equally as productive as video conferences and video classes, which are both forms of group communication among individuals. While everyone can see and hear each other during video conferences, only one professor can be seen and heard during a video lesson, even if he can simultaneously see and hear every student. All over the place, classes based on video broadcasts are now used. Simulators and simulators are arguably the most intriguing but least popular way. They make it possible for professionals and students all over the world to acquire useful skills. An essential factor is that students practically do not suffer stress while training on simulators and simulators because they are not afraid to destroy valuable machinery while rolling metal, blow up a plant while pumping oil products, or murder people while piloting an airplane.

4 Practical Part

4.1 McKinseyand Company

4.1.1 History

Since 1926, when James O. McKinsey, a professor at the University of Chicago, founded a consulting firm in Chicago, McKinsey and Company has offered strategic guidance to businesses and other organisations. When McKinsey resigned to take the helm at Marshall Field and Co., Marvin Bower, who had joined the company in 1933, was named the new CEO. Bower defined the fundamental values of the company and developed the profession of management consulting. In 1959, McKinsey established its first overseas location in London, and it has continued to grow ever since. It is presently the largest pure consulting firm in the world, with over 100 offices spread over more than 50 nations (Duff, 2013, p. 9).

James McKinsey, an accounting professor at the University of Chicago, established McKinsey and Company in Chicago in 1926 under the name James O. McKinsey and Company. The business, which referred to itself as a group of "*management engineers*", initially provided advising on the application of accounting principles to management choices. Tom Kearney and Marvin Bower, partners, were Mr. McKinsey's initial recruits in 1929 and 1933, respectively. In 1932, the company's second office in New York City was founded.

In 1935, Mr. McKinsey briefly left the company to act as Marshall Field's client's chairman and CEO as they carried out the reorganisation plan developed by James O. McKinsey and Company. The next year, McKinsey joined with the accounting firm Scovell, Wellington and Company to form McKinsey, Wellington and Co. Tom Kearney and Marvin Bower disagreed about how to operate the company as a Wellington project that made up 55% of McKinsey, Wellington and Company's billings was set to expire. In addition, James O. McKinsey went dead in 1937 from pneumonia. As a result, McKinsey, Wellington and Company split in 1939. While the management engineering practise was divided between McKinsey and Company and McKinsey, Kearney and Company, the accounting practise

was transferred back to Scovell, Wellington and Company. Marvin Bower, who served as Guy Crockett's deputy, is credited with developing the company's guiding principles and strategy before taking over as managing partner of the new McKinsey and Company. In 1946, the McKinsey name was exclusively licenced to the New York office.

Especially in Europe, McKinsey and Company expanded significantly in the 1940s and 1950s. By the 1960s, it employed more than 200 people, including 37 in London by 1966, up from 88 in 1951. Early in the 1960s, it opened a branch in Australia. Six European operations contributed more than one-third of the company's revenues by the decade's end. In 1950, Marvin Bower was chosen to take over for Guy Grockett as managing director. The profit-sharing, leadership, and planning committees of McKinsey were established in 1951. The clientele of the company grew significantly in the post-World War II era, particularly among governments, defence contractors, bluechip corporations, and military organisations. In 1956, following seven years of consideration, McKinsey became a private corporation with shares that were only available to McKinsey employees. In 1959, a London office was opened along with a strategy for global expansion (Duff, 2013, p. 4).

The company's earnings decreased after Bower retired in 1967. New rivals like the Boston Consulting Group and Bain and Company increased the pressure on McKinsey by promoting distinctive branded goods like the Growth-Share Matrix and touting their domain knowledge. The Commission on Firm Aims and Goals, which McKinsey established in 1971, found that McKinsey had grown overly focused on geographic expansion and lacked sufficient industry understanding. The commission suggested that McKinsey curtail its expansion and create sector specialisations. Ron Daniel was chosen as managing director in 1976 and held the position until 1988. By establishing 15 specialised working groups within McKinsey called Centers of Competence and practise areas dubbed Strategy, Operations, and Organization, Daniel and Fred Gluck contributed to the company's departure from its generalist approach (Kiechel, 2010, p. 2). In 1987, Daniel also launched McKinsey's knowledge management initiatives. By the time he left the company in 1988, the company was expanding once again, and new locations had been established in Rome, Helsinki, So Paulo, and Minneapolis.

From 1988 through 1994, Fred Gluck was the managing director of McKinsey. During his tenure, the company's revenues more than doubled. He set over 72 sectors, centres, working groups, and projects for McKinsey. Over a 20-year period, McKinsey and Company increased eight-fold. When the corporation spent $10 million to acquire the Information Consulting Group (ICG) in 1989, it was hoping to add talent in the IT services sector. However, by 1993, 150 of the 255 ICG employees had left due to a cultural conflict.

The utilisation rates of McKinsey's consultants fell from 62 to 51 percent as a result of the dot-com bubble burst, but the company didn't let any employees go as a result. Rajat Gupta was chosen as the firm's managing director in 1994, making him the first partner who was not an American citizen (Hirahara, 2003). McKinsey had increased from 2,850 to 8,000 consultants by the end of his tenure. In order to assist internet companies, McKinsey established "*accelerators*", where the company took stock-based compensation. McKinsey introduced many public and social sector-focused approaches in 2001. It accepted a lot of clients from the public sector or nonprofits on a pro gratis basis. In 2002, McKinsey had increased its budget for knowledge management from $8.2 million in 1999 to $34.7 million.

The managing director job was chosen in 2003 for Ian Davis, the director of the London, United Kingdom office. After a period in which the company had developed quickly, a development that, according to some persons connected to McKinsey, was a break from the organization's heritage, Davis vowed a return to the company's essential ideals. A headquarters for the Asia-Pacific area was built by the company in Shanghai, China, also in 2003. More than 55 % of McKinsey's earnings came from sources outside the United States by 2004 (Baily, 2004, p. 10).

4.1.2 Current development

In the wake of the most recent global financial crisis, Sir Ian Davies, one of the former managing directors of McKinsey and Company, penned these comments 13 years ago. They seem to be quite current, especially since that the pandemic is slowly fading from people's life. It is becoming more and more obvious that the current age will be distinguished by two fundamentally different "*normals*": the pre-COVID-19 era and the "*next normal*" that will appear in the post-viral era.

The global community continues to fight the coronavirus pandemic with different degrees of effectiveness. At the same time, the techniques used to counteract it are comprehensive, including the complete shutdown of certain economic sectors, the widespread implementation of a quarantine system, and other restraints. Nevertheless, the virus has spread globally and has been identified in more than 200 states despite all attempts to contain it. Few cases are reported in some places, hundreds, or thousands in those with early community transmission, and tens of thousands in those with unchecked, widespread transmission.

Now, McKinsey has a sizable number of offices worldwide and is present in all but a small number of nations. It is important to note that McKinsey is one of the most seasoned consulting firms available and has a sizable cash flow. There are companies older and wealthier than McKinsey and Company, as was previously mentioned, but this one has an aura about it, an unspoken image of a company that is very secretive, professional, and has high standards for both the internal team and the organisations that apply to it.

4.2 Research design

In order to understand the perception of the e-learning within McKinsey and Company and their Prague headquarter, a series of pertinent hypotheses were developed, whose creation had originally been based on the series of publications and books included in the literature review of the work. Consequently, the questionnaire that was distributed among workers of McKinsey and Company is based on the series of hypotheses, which allows the utilization of hypothesis testing process to properly address those hypotheses and test them. Those hypotheses are:

1) *There is no difference in the evaluation of the usefulness of e-learning of workers between different genders.*
2) *There is no difference in the evaluation of the usefulness of e-learning of workers between different age groups.*
3) *There is no difference in the evaluation of experience with the e-learning system between workers of different genders.*
4) *There is no difference in the evaluation of experience with the e-learning system between workers of different age groups.*

5) *There is no difference in the attitude towards McKinsey and Company between workers of different gender.*
6) *There is no difference in the attitude towards McKinsey and Company between workers of different age category.*
7) *There is no relationship between the willingness to recommend the e-learning system of McKinsey and Company and gender.*
8) *There is no relationship between the willingness to recommend the e-learning system of McKinsey and Company and age.*
9) *There is no relationship between the satisfaction with the job and gender.*
10) *There is no relationship between the satiafaction with the job and age.*
11) *There is no relationship between the feeling about improving the e-learning system within the company and gender.*
12) *There is no relationship between the feeling about improving the e-learning system within the company and age.*

Consequently, the last four hypotheses, notably the seventh, eighth, nineth and tenth are tested using Chi-square testing approach, whereas the first six are tested according to the independent t-test approach. Testing is performed in Jamovi, which is a popular piece of statistical software.

4.3 Sampling, survey and participants

For obvious reasons, the sampling technique has to be based on the set of predefined criteria that are introduced by the researcher. Effectively, the main idea of the thesis is to address the situation with the e-learning system within McKinsey and Company, so the only one crucial criterion that is considered is direct affiliation with the company by the person taking part in the survey. Therefore, the type of sampling used in this research is snowball sampling, where the acquaintance of the researcher is first introduced to the questionnaire and then she invited more colleagues of his to participate in the analysis. The total number of people who participated in the study is 100, which, to some extent, might be treated as representative for the Czech Republic only since the number of employees of the company does not exceed the figure of 300, but this sample cannot be used to generalize the situation of the company's employees all around the globe since it is still too small. Therefore, the analysis has an illustrative nature, which might be viewed as a limitation, but it is more

relaxed given the bachelor's level of the thesis. Consequently, based on the series of hypotheses, the list of questions presented in the appendix to the bachelor thesis. The next chapter (4.4.) presents the testing results.

4.4 Testing results

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
How useful was the e-learning system of McKinsey & Company to you?	Student's t	−0.899	98.0	0.371

Note. $H_a\ \mu_{Female} \neq \mu_{Male}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
How useful was the e-learning system of McKinsey & Company to you?	Female	50	2.92	3.00	0.922	0.130
	Male	50	3.10	3.00	1.07	0.152

Figure 6, Hypothesis 1. Source: own research based on primary data, 2024.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
How useful was the e-learning system of McKinsey & Company to you?	Student's t	2.03	98.0	0.045

Note. $H_a\ \mu_{18\text{-}40} \neq \mu_{>40}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
How useful was the e-learning system of McKinsey & Company to you?	18-40	85	3.09	3.00	0.946	0.103
	>40	15	2.53	2.00	1.19	0.307

Figure 7. Hypothesis 2. Source: own research based on primary data, 2024.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
How would you rate your experience with the e-learning system of McKinsey & Company?	Student's t	−1.02	98.0	0.308

Note. $H_a\ \mu_{Female} \neq \mu_{Male}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
How would you rate your experience with the e-learning system of McKinsey & Company?	Female	50	2.98	3.00	1.04	0.147
	Male	50	3.20	3.00	1.11	0.156

Figure 8. Hypothesis 3. Source: own research based on primary data, 2024.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
How would you rate your experience with the e-learning system of McKinsey & Company?	Student's t	1.67	98.0	0.098

Note. $H_a\ \mu_{18\text{-}40} \neq \mu_{>40}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
How would you rate your experience with the e-learning system of McKinsey & Company?	18-40	85	3.16	3.00	1.03	0.112
	>40	15	2.67	3.00	1.23	0.319

Figure 9. Hypothesis 4. Source: own research based on primary data, 2024.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
What is your attitude towards McKinsey & Company as a whole?	Student's t	−0.802	98.0	0.424

Note. $H_a\ \mu_{Female} \neq \mu_{Male}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
What is your attitude towards McKinsey & Company as a whole?	Female	50	3.00	3.00	1.16	0.164
	Male	50	3.18	3.00	1.08	0.153

Figure 10. Hypothesis 5. Source: own research based on primary data, 2024.

Independent Samples T-Test

Independent Samples T-Test

		Statistic	df	p
What is your attitude towards McKinsey & Company as a whole?	Student's t	1.86	98.0	0.066

Note. $H_a\ \mu_{18\text{-}40} \neq \mu_{>40}$

Group Descriptives

	Group	N	Mean	Median	SD	SE
What is your attitude towards McKinsey & Company as a whole?	18-40	85	3.18	3.00	1.08	0.117
	>40	15	2.60	2.00	1.24	0.321

Figure 11, Hypothesis 6. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Would you recommend the e-learning system of McKinsey & Company to any of your colleagues or friends?	What is your gender?		
	Female	Male	Total
No	23	8	31
Yes	27	42	69
Total	50	50	100

χ^2 Tests

	Value	df	p
χ^2	10.5	1	0.001
N	100		

Figure 12. Hypothesis 7. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Would you recommend the e-learning system of McKinsey & Company to any of your colleagues or friends?	What is your age?		
	18-40	>40	Total
No	25	6	31
Yes	60	9	69
Total	85	15	100

χ^2 Tests

	Value	df	p
χ^2	0.668	1	0.414
N	100		

Figure 13. Hypothesis 8. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Are you satisfied with your work at McKinsey & Company?	What is your gender?		Total
	Female	Male	
No	23	11	34
Yes	27	39	66
Total	50	50	100

χ^2 Tests

	Value	df	p
χ^2	6.42	1	0.011
N	100		

Figure 14. Hypothesis 9. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Are you satisfied with your work at McKinsey & Company?	What is your age?		Total
	18-40	>40	
No	28	6	34
Yes	57	9	66
Total	85	15	100

χ^2 Tests

	Value	df	p
χ^2	0.283	1	0.595
N	100		

Figure 15. Hypothesis 10. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Should McKinsey & Company further improve their e-learning system?	What is your gender?		
	Female	Male	Total
No	21	39	60
Yes	29	11	40
Total	50	50	100

χ^2 Tests

	Value	df	p
χ^2	13.5	1	<.001
N	100		

Figure 16. Hypothesis 11. Source: own research based on primary data, 2024.

Contingency Tables

Contingency Tables

Should McKinsey & Company further improve their e-learning system?	What is your age?		
	18-40	>40	Total
No	51	9	60
Yes	34	6	40
Total	85	15	100

χ^2 Tests

	Value	df	p
χ^2	0.00	1	1.000
N	100		

Figure 17. Hypothesis 12. Source: own research based on primary data, 2024.

4.5 Analysis

In order to summarize the results of the hypothesis testing procedure, Table 3 is introduced in this sub-chapter that allows easily interpret the results of the analysis.

Hypothesis	Result
H1	Not rejected.
H2	Rejected.
H3	Not rejected.
H4	Not rejected.
H5	Not rejected.
H6	Not rejected.
H7	Rejected.
H8	Not rejected.
H9	Rejected.
H10	Not rejected.
H11	Rejected.
H12	Not rejected.

Table 3. The summary of hypothesis testing. Source: own research.

Out of the total of 12 hypotheses, just 4 were rejected, which technically means that there was found a relationship between the observed variables. To be more specific, the rejection of the hypothesis no. 2 suggests that there is a difference in the evaluation of the usefulness of e-learning of workers between different age groups – the difference is explained by significantly higher evaluation of the usefulness of the younger age category. Consequently, the rejection of the hypothesis no. 7 suggests that there is a relationship between the willingness to recommend the e-learning system of McKinsey and Company and gender, which is explained by the fact that male respondents are more prone to recommending the e-learning of McKinsey to their acquaintances. The third rejected hypothesis was the hypothesis no. 9, meaning that there is a relationship between the satisfaction with the job and gender, which is once again explained by a higher satisfaction of male respondents. Lastly, the rejection of the eleventh hypothesis indicates that there is a relationship between the feeling about improving the e-learning system within the company

and gender with male respondents feeling more that there should be no further improvements in the system. The other hypotheses suggest that no significant differences are identified between different age groups and genders.

5 Results and Discussion

In the end, based on the analysis performed in the empirical part of the work, it is possible to draw two important conclusions about both McKinsey and Company and their e-learning system. First off, McKinsey and Company is surely an example of a company that stands out from the crowd mainly due to the way how they handle their operations and the way how the overall working processes are organized. Further confirmation for the statement provided earlier is found from the internal perspective, where the majority of employees are satisfied with their job, and they do also highly evaluate their working experience with McKinsey and Company. The findings of the bachelor thesis prove what has been suggested by O'Mahoney and Sturdy (2015) who also highly evaluated the company's way of organizing working processes and management (O'MAHONEY and Sturdy 2016).

When it comes to the other side of the question, which is directly associated with McKinsey and Company's e-learning system, it is found out that the majority of respondents do also positively think of the e-learning system introduced by the company. Furthermore, when it comes to factors that potentially influence one's views about the e-learning processes and the system as a whole, the gender factor seems to be the most important one based on the analysis performed on the selected sample of workers of Prague headquarter. For 3 out of 4 hypotheses, where a particular connection between the variables were identified, they were concerned with the gender variable, while just 1 out of rejected ones was associated with age. Additionally, male workers seem to be on better terms with the e-learning system of the company due to higher evaluations on average and willingness to recommend the system to other colleagues of theirs, which indicates that it is either that the system is more oriented towards men or that men have a stronger sentiment towards the system due to particular reasons, where one of them can be the fact that they had not been introduced to any e-learning system prior to their work in McKinsey and Company. This finding does not match the idea of González-Gómez et al. (2012) who concluded that female respondents are more prone to higher satisfaction from e-learning (González-Gómez et al. 2012).

In the end, recommendations that are drawn for the thesis suggest that the research design has to be more robust and representative since basing one's conclusions on a small sample of 100 participants is not the best in terms of the representativeness and accuracy of

results. At last, it is also recommended to increase the pool of hypotheses and focus on broader categorical factors that can potentially set different groups of people evaluation of the e-learing system apart.

It is further suggested to enhance the analysis by including a larger sample of respondents, possibly encompassing individuals from other countries within the same region, such as the European Union. This expanded approach not only facilitates an assessment of McKinsey and Company's e-learning system quality and employee attitudes but also allows for the exploration of cultural variations among workers, potentially adding value to Geert Hofstede's cultural dimensions framework.

Moreover, McKinsey and Company are encouraged not to limit their current efforts and to consider ongoing investments and enhancements in their e-learning system. Such initiatives are likely to contribute positively to the organization's overall success, enabling it to expand beyond its current operational boundaries and regions.

6 Conclusion

The goal of the bachelor thesis was to take an insight into the e-learning system of McKinsey and Company based on the selected sample of workers from the headquarter in Prague. Additional sub-goal of the bachelor thesis was to analyze potential factors that can set differences in the way how people view a particular e-learning system. Based on the small case study of the headquarter in Prague, it is found out that gender does really matter in what concerns the perception of e-learning and one's satisfaction. Furthermore, it is found out that male respondents are of more positive attitude towards the e-learning system of McKinsey and Company.

Whereas similar systems offer numerous benefits such as quicker adaptation of workers to new working places and positions, there are also various disadvantages such as the maintenance cost and provision of constant updates to the system, where the latter can become especially complicated during less fortunate economic times.

At last, it is recommended to improve the analysis by incorporating a larger sample of respondents, potentially capturing responses of people from other countries from potentially the same region, such as the European Union. By doing so, it can help not to just evaluate the quality of the e-learning system of McKinsey and Company and attitudes of their workers towards the system, but it can also help to identify further cultural differences between workers potentially positively contributing to the framework developed by Geert Hofstede related to cultural dimensions.

Additionally, it is recommended that McKinsey and Company do not have to stop where they currently are, and they should consider further investments and improvements to be made in their e-learning system since it is likely to positively contribute to the overall success of the organization and help it grow beyond the current boundaries and regions where the country operates.

When it comes to the implications on the corporate business and the case study of McKinsey & Company, it is wise to suggest that as the phenomenon of corporate e-learning gained its momentum, it is logical to expect that employees, especially the ones with

experience in other major companies and upon shifting to McKinsey & Company and the likes of them, will expect similar systems to be integrated with user friendly interface that will positively contribute to the work of new employees. Henceforth, based on this suggestion, it is wise to suggest that all companies should integrate similar system and potentially ameliorate the existing ones, where the latter recommendation is addressed mainly to those companies already possessing such systems.

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8 List of Supplements

8.1 List of pictures

8.2 List of tables

8.3 List of abbreviations

EL	E-Learning
AICC	Aviation Industry Computer-Based Training Committee
HTTP	HyperText Transfer Protocol
VLE	Virtual learning environment
ADL	Advanced Distributed Learning
LMS	Learning Management Systems
LCMS	Learning Content Management System
xMOOCs	eXtended Massive Open Online Course
ROI	Return on Investment
VR	Virtual Reality
AR	Augmented Reality

Appendix

Structure of questionnaire

1) What is your gender?

a) Male

b) Female

c) Prefer not to say

2) What is your age?

a) 18-40

b) >40

3) What is your working experience?

a) <1

b) 1-5

c) >5

4) Is McKinsey and Company your first working experience?

a) Yes

b) No

5) How useful was the e-learning system of McKinsey and Company to you?

a) 1

b) 2

c) 3

d) 4

e) 5

6) How would you rate your experience with the e-learning system of McKinsey and Company?

a) 1

b) 2

c) 3

d) 4

e) 5

7) What is your attitude towards McKinsey and Company as a whole?

a) 1

b) 2

c) 3

d) 4

e) 5

8) Would you recommend the e-learning system of McKinsey and Company to any of your colleages of friends?

a) Yes

b) No

9) Are you satisfied with your work at McKinsey and Company?

a) Yes

b) No

10) Should McKinsey and Company further work on improving their e-learning system?

a) Yes

b) No