

THE IMPACT OF NEW TECHNOLOGIES “E-LEARNING” ON THE PRODUCTIVITY OF COMPANIES IN A PERIOD OF CRISIS: INTERVIEWING BPOS DURING COVID-19

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Abstract: -

New information and communication technologies have changed our economic and business functions. In this case, the training strategy has changed, disrupting the internal functioning of the organization. For this reason, information and communication technologies (ICT) must be applied in training, creating a new reality called “Elearning”. Indeed, the Covid-19 crisis has disrupted the economic system in all sectors and proved the limits of face-to-face training. As a result, the company is forced to change its habits and adapt more quickly to these turbulences to weather the financial crisis and ensure performance.

This article aims to explore the contribution of e-learning to the commercial performance of three companies in the field of outsourcing and transaction management BPO's in times of covid-19 crisis. A qualitative analysis was conducted: A series of semi-directional interviews were conducted with about 14 participants from the Human Resources Department. The companies studied have therefore embarked on this new practice, which is beginning to grow.

Keywords: - *E-learning, Covid-19, crisis, performance, interviews, practice.*



INTRODUCTION

In recent years, due to technological changes, training in the field of work has increased. Some training methods, such as virtual learning or e-learning, are gradually being favored by large companies, which realize that e-learning has changed the learning process related to the external and internal environment.

Indeed, after the health crisis caused by the Covid-19 pandemic, we are now experiencing a major transformation, which is why e-learning is increasingly becoming an unavoidable reality in the company's learning process. For some people, e-learning is a way to manage and control the costs associated with standard employee training, while for others it is a comfortable way to acquire knowledge and skills. Training that is not limited by space or time.

The diversity of e-training is mainly linked to the company's openness to new information technologies, culture, and organizational changes. The learning enterprise concept is becoming more and more important and training budgets are constantly increasing, making the spread of learning and corporate culture more and more effective. In this transition, the human aspect is as important as the financial benefit.

During the outbreak of Covid-19, large companies invested more in online training. On one hand, they have ensured the follow-up of the staff members' training while maintaining the safety measures, whether it is a question of ongoing or new hire training. On the other hand, they have managed to save the enormous cost of face-to-face training by creating a certain degree of flexibility, a healthy atmosphere of knowledge development, interacting with employees through technical tools, and different levels of performance. At this point, our main question can be formulated as follows:

« How do e-learning tools help improve the productivity of companies during Covid-19 ? »

In this case, our article aims to focus on the contribution of online training to the performance of companies during the pandemic, and how the latter can be an effective alternative to face-to-face training while ensuring effective learning for employees, and this is mainly the main assumption of our research.

To answer our question, we will dedicate the first part to the definition of e-learning, then we will examine the added value and development of e-learning skills during the pandemic, and we will finally use its contribution as a factor of performance during the Covid-19 crisis. The question raised follows on from several theoretical contributions, and the use of qualitative methods in the inductive approach will help to understand the interpretation of the subject by the participants by managing a set of interview guides with the managers.

1. Conceptual Background:

a) Definition and framework:

There are so many expressions related to e-learning, which creates some confusion. We sometimes find the terminology e-training, virtual learning, distance learning, and even distance learning. The concept of "e" means "electronic" or "online". The term "learning" is generally associated with the following three words: learning, training, and teaching. It is more inclined to learner-centered terminological learning, leading some people to prefer virtual terminological learning. According to Basque & Brangier (2006, p. 435), e-learning is: *"the acquisition of knowledge and skills through information and communications technologies (ICT) to foster learning interactions, both in terms of content, activities and learning tools, than with other users."*

Online learning does not necessarily require the use of the Internet. It can also be obtained from various independent LAN applications at any time and in any place. Online learning can be formal, informal, or both. The distinction between e-learning and training is necessary. According to Lewandowski (2003): *« The learners are valued as producers of knowledge... »* and *« ...being for the trainer to «calibrate» this tailor-made training according to the learner needs. »*.

The first common difference between e-learning models is their classification: training delivered entirely offline (asynchronous online training), training delivered remotely in real-time (virtual classroom or synchronized classroom), or formation combining presence and distance. In the case of the combined formulas, we will address *« blended learning »* or *« mixed learning »*. Currently, companies that switch to e-learning prefer training that combines presence and distance. There are therefore many forms of e-learning, and each company can find one or more formulas that are best suited to their needs, methods and current environment of its employees.

b) E-learning: innovation in skills development:

As some illustrations suggest, e-learning is an approach to develop and update skills in companies, more precisely, these applications are distinguished by both the objectives they pursue, the technologies used, the resources that are invested in their development (human, financial, information, etc.) and the people who participated in its development (e.g.: trainer, head of human resources, employees recognized as specialists). However, in all situations, e-learning applications meet specific needs. Their development is not accidental. They are seen as the best way to meet a serious trade challenge. Thus, these applications can aim to develop the skills of categories of employees whose performance is considered strategic for the company.

Please note that our assertion is based on the definition of innovation proposed by Rogers (1983) in "The Origin and Development of Innovation Diffusion" as follows: *« process through which an individual (or other decisionmaking units) passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation of the new idea, and confirmation of this decision »*.

c) Online training: sustainable response, not just context:

The online training includes functions to meet the new training needs of companies, that is, it can promote the organization and technical support. *« Preparing critical online learning content through a remote training platform is another way to*

support business continuity », (Williams, 2021). To benefit from the added value of e-learning, particularly in times of crisis, all company stakeholders must use these potentials to achieve effective learning. The challenge is to separate the strengths and weaknesses of the participants to a certain extent to check whether there are operational levers to promote the acceptability of creating e-learning to accompany changes in a given environment. To try to clarify this point, we recommend checking the added value of using e-learning tools from their point of view.

➤ The benefits for the employee:

From the point of view of the employee, E-learning makes it possible to obtain training, it can take note of the training provided through the new portal of information and communication technologies, understand the different parameters of the training, and thus facilitate the processing of knowledge management.

« In this way, staff training will be more efficient, they will have more knowledge and skills, which directly contributes to the quality of the work, and thus affects the efficiency and effectiveness of the organization as a whole » (Jokic, Pardanjac, Eleven, 2012).

Also, from the perspective of taking an online training course, this is generally better adapted to one's personal needs. Indeed, as Philippe Gilles (2000) points out in his french book entitled *« E-formation, NTIC et reengineering de la formation professionnelle »*: *« the response to its needs is no longer a prototyped content, as in the case of face-to-face training, but content directly adapted to its demand or need »*. E-learning schemes tend to place the individual and his needs at the center of training. Sandra Bellier (2001), also highlighted this "refocusing on learners", which she confirmed through her french work as well *« e-learning »*: *« We are changing the model. From the "knowing" (the trainer) who trains and transmits to his disciples according to his rhythm, his goodwill, his degree of competence and the constraints of the organization to which he belongs (...) e-learning puts the learner at the center. »*. This evolution is based mainly on two new possibilities: e-learning tools allow not only to select content more adapted to individual needs but also to script while respecting the cognitive characteristics of learners: *« one person is more sensitive to images and animation, another is more conceptual, another memorizes better through a process of trial and error (...) »* (Philippe, Gil, 2000).

In addition, online learning tools allow learners to manage their time more flexibly. They allow everyone to follow the training at their own pace and adapt to the conditions of the crisis, to have great autonomy in the management of training time. Finally, the change itself, namely the use of a new mode of learning, can be considered positive. An employee can acquire skills in the use of information and communication technologies, and he can develop self-study skills. It is therefore an opportunity for learners to change their frame of reference and adapt to the technological and organizational model on which their future employability depends. Individuals may also feel that it is beneficial to try innovative devices.

➤ The benefits for the trainer:

The trainer in the e-learning system can be an external provider, or a full-time or occasional employee of the company who performs this function. According to Ait Kaikai (2014): *« Thanks to these new learning opportunities offered by ICT, a range of digitized and remote information resources are made available to students to enable them to learn easily, to easily access knowledge, and to train themselves. Apart from spatial and temporal constraints. »*. In general, whatever the trainer's career path, E-learning tends to make him a tutor, that is to say, the accompaniment of the people participating in the training. Trainers can use e-learning tools to carry out various activities: personalized support with asynchronous and synchronous communication tools, training, and multimedia support. It is therefore an opportunity to strengthen and acquire engineering training and new skills in information and communication technologies. For employees, online training also allows for flexible time management and time savings due to the lack or reduced number of business trips. Finally, from a professional point of view, the innovative dimension of this practice is beneficial, and since these practices are about to become popular, it also opens up opportunities for career development.

d) E-learning as a factor in companies' performance in Covid-19 :

From a business perspective, another strong argument for adopting e-learning during Covid-19 or any other health crisis is the potential reduction in costs. Indeed, as we have already seen, the challenge of the evolution of online training is not only to improve the efficiency of response to technological and organizational changes but also to reduce training costs. Training leaves the area of the cost center and joins the area of the source activity, as this is the basic problem of e-learning. So, how do E-learning tools make training a source of competitive advantages?

➤ Cost reduction factors:

« The crisis also encourages companies to improve the efficiency of training and cost control, hence the rise of e-learning » (Brillet, 2009). Compared to face-to-face training, one of the key benefits of online training may be that it reduces costs. Several arguments have been made. The company will have fewer travel costs and more distribution opportunities, and the cost of service intervention will be reduced. In addition, there are no transportation and accommodation costs. Better time management reduces the cost of wages paid for training time. Because the employee is at work, the cost of absenteeism (the impact of unavailability on profitability) is low.

➤ Performance factors:

E-learning can significantly reduce training time for two main reasons. Compared to traditional training, the opportunities offered by customized curriculum and content tools will allow learners to acquire the same skills in a shorter time. The second reason is that training at work and via the interface will have the effect that the individual will concentrate on his procedures and activities without interrupting or slowing down his pace of learning. In addition, in our opinion, the basic performance factor is a factor that we have often mentioned: e-learning tools make it possible to train as close as possible to operational needs, so training will impact production in real-time.

2. The applied theories:

a) Learning theory:

In traditional face-to-face training, the time and space between the learner and the trainer are close, so that the latter can adapt to the overall difficulties in real-time while maintaining harmony and coherence. In this context, trainers learn from experience and adjust learning methods according to the difficulties they encounter. In the case of e-learning, technical assistance compensates for the lack of direct interaction with trainers by offering different learning technologies or methods that learners can use according to their needs. Indeed, in the context of this crisis, e-learning is an asset that companies rely on online training to maintain their performance.

➤ Individual models of learning:

In 1975, Piaget, a psychologist, pointed out that the learning model (behaviorist, cognitive, constructivist) “Balancing cognitive structures: a central problem of development” focuses on environmental participants to develop their learning :

- Behavioral model: It is based on repetition. In doing so, it stimulates and forces the memorization of information by overexposure. By modulating rewards with specific responses, this method creates and reinforces appropriate observable behaviors.
- Cognitive model: In the case of the behavioral approach with global stimuli, the cognitive approach will break down the information presented so that the complexity of the content presented can be adapted to the learner’s processing abilities. Then demonstrate in an increasingly complex way so that learners can organize the relationships between the elements presented. In the method of cognitivism, as in the behavioral method, learning takes place according to a path determined by knowledge. However, in the cognitive approach, the learner will be asked to analyze his mistakes to develop learning strategies and avoid repeating the same mistakes.
- Model of constructivism: Based on the work of Piaget (1896-1980), the main idea of constructivism is that the behavior of learners plays an important role in the development of their learning. In this method, there must be a gap between the information to be learned and the learner’s ability to absorb the information. The task of filling or filling this gap is transferred to the learner. It is by facing a problematic situation (not necessarily a solution) that the learner will be guided to ask questions and mobilize his knowledge to find solutions.

b) Resource theory:

The basic reference of Resource-Based Theory is undoubtedly Penrose (1959), who defined the concept of resource service. The inputs to the production system are not the resources themselves, but the services they provide. The nature of these services depends on the knowledge possessed by the sole proprietorship. The two types of resources (material and human) are combined to create unique, subjective, and specific production opportunities for each company through interaction. Growth is driven by the search for resource utilization opportunities (potential material resource production services determine the scope and direction of the search for new knowledge and resources).

On this basis, some thirty years later, the concept of resources was proposed to define the bases of resource theory. This knowledge management perspective derives from and extends resource management theory, although the latter recognizes the decisive role of knowledge in an enterprise. Specifically, resource management theory treats knowledge as a general resource, rather than as having specific characteristics. Therefore, the theory does not distinguish between the different types of knowledge that provide a competitive advantage to the company.

Indeed, the material and intellectual resources of the company are an asset during the crisis. Because most companies have become aware of the value of knowledge, we have provided trainers and employees with the resources they need to maintain the transfer and maintenance of knowledge through computer resources and tools.

3. Methodology:

a) The Epistemological Posture:

The quality of a research design is based on the logic of the whole research approach and the coherence of all its components: the problem, the epistemological positioning, the methodology, the theories selected, the observation fields (Royer & Zarlowski, 2007).

In explanatory positioning, the process of knowledge generation presupposes an understanding of the actual meaning given to the actors. The goal of this paradigm is to understand reality rather than to explain reality, which is achieved through the actor's interpretation of reality.

To interpreters, reality depends on the actor; the goal that researchers generally pursue is to understand reality by analyzing the interpretations made by the actor. Their research method is rather inductive, or in the extreme case, takes into account the intentions, motivations, reasons, expectations, and beliefs of the participants.

Our goal in this research is to understand how e-learning can contribute to business performance during the Covid19 crisis. Therefore, we tried to find outsourcing and transaction management (BPO) departments, which are considered "learning organizations" that are open to learning.

b) The qualitative methodology:

In management science, qualitative research aims to better understand the context of phenomena and the mechanisms behind them. Therefore, practitioners of these methods are interested in the reality anchored in a particular environment. In management science, qualitative research aims to better understand the context of phenomena and the mechanisms behind them. Hence, practitioners of these methods are interested in the reality anchored in a particular environment. In this perspective, Giroux (2003, cited by Notais A, 2009) considers that this method makes it possible to describe and apprehend all the complexity of a phenomenon according to the so-called global method, and takes into account a large number of factors. In addition, unlike quantitative methods, qualitative methods guarantee high internal validity. Two reasons are related to the richness of the data collected. For one, qualitative observations provide researchers with a better understanding and information about the phenomenon under study, and they can also have a more complete understanding of the different causes of the phenomenon and the possible interactions between them (Miles and Huberman, 2003). Alternatively, this information and data is more grounded in the reality of practice and allows for an understanding of the role and influence of the social environment in which the research phenomenon takes place on its understanding.

As mentioned earlier, in this work, the goal is to understand how e-learning can contribute to the company's performance during the covid-19 crisis. As part of the conference, we are taking part in a conducive process to understanding the meaning of the participants in the e-learning phenomenon and the factors and dimensions related to the interviewee. This can either facilitate or block the process and enter into the performance of the company in times of Covid-19 crisis to evaluate its effectiveness. Our focus is to investigate how the phenomenon of virtual learning unfolds within this analytical framework.

To achieve this objective, we use the qualitative method of the inductive method, as it allows for an in-depth and contextual exploration of the research object, through interviews, which allow for direct contact with participants holding information relevant to the understanding of the reality of general phenomena. The field we are studying has to lead us to carry out several case studies because it allows us to draw on a diversity of experiences. **The goal is to measure the e-learning effectiveness and its contribution to the company's performance during the Covid-19 economic crisis through a set of semi-directive interview guidelines from trainers and human resources managers of three companies in Morocco in the Outsourcing and Transaction Management (BPO) sector.**

Similarly, Yin (2012) and Wacheux (1996) argue that qualitative case study methods are best suited to the research questions of "how" and "why". This approach can increase understanding of local perceptions and explain how people understand, interpret and manage daily situations in a specific environment (Miles & Huberman, 2003). Also, Strauss and Corbin (1990) have pointed out that these methods are justified for categories of problems that depend on the experience of the actors. The interests of qualified researchers are more specifically related to behaviors, life stories, social interactions, organizational functions, or social movements. Therefore, this method allows researchers a great deal of freedom to execute their projects. Thus, one of the advantages of this method is its flexibility, which is primarily attributed to the ability to adapt to the reality of the field and change the data access strategy during the process of generating field data.

➤ Techniques and tools for data production:

Since the case study strategy aims to collect as much detailed information as possible to capture the phenomenon as a whole, we use two types of equipment to generate data: Semi-structured interviews as well as internal and external documentation.

✓ Interviews as the main data collection tool: Given the research strategy and epistemological positioning adopted in this research, interviews are the most suitable tool for collecting data in this area. Extensive research and participant interviews on the meaning and interpretation of the elearning phenomenon proved the relevance of using and conducting semi-structured interviews with training managers.

The selection of interviewees is intended to draw a different sample for the population of each company studied, but also to constitute a representative group of interviewees, or "key informants". Interviews with these "key insiders" enhanced the possibility of obtaining various explanations and in-depth information.

The target groups in the three companies studied are trainers, quality managers, and training managers. The structure of our interview guide is similar to the process followed to develop our conceptual framework, so its focus allows us to master and understand e-learning within the company.

We developed our interview guidelines in three main areas:

1. E-learning in companies: this area deals with the notion of e-learning and the perception of the interviewees on E-learning as well as their use of its tools in their work.
2. To take stock of online training in times of the Covid-19 crisis insofar as it has enabled the interviewees to overcome the crisis by using new information and communication technologies (ICTs), as well as their opinions concerning the difference between distance learning and standard training.
3. Determine the contribution of e-learning to business performance in times of crisis.

On this basis, we administered about fourteen semi-directive interview guides with the managers of the companies, which lasted between 45 minutes and one hour, depending on the interviewees. After having administered the interview guides, we proceeded to transcribe them, word by word, about 80 pages (Times New Roman Normal font, size 12, line spacing 1.5). Afterward, we carried out a thematic analysis after extracting the main features of the interviewees' answers, which we tried to synthesize in an analysis grid made as follows:

Table N°1: Content analysis grid

	Interview 1	Interview 2	Interview 3	Interview 4	...	
Topic 1						Horizontal Summary
Topic 2						Horizontal Summary
...						Horizontal Summary
	Verticale Summary	Verticale Summary	Verticale Summary	Verticale Summary	Verticale Summary	

Source: Made by the Author

Our work will be based on a textual analysis, which is a rich and rigorous analysis since it involves reading the entire corpus, identifying what has been said, noting it, and reporting on the key ideas or topics developed in the text, while at the same time reinforcing them through the verbatim. Indeed, the content analysis consists in synthesizing the interviews carried out, to be able to elaborate a synthesis concerning each topic developed, namely through the horizontal analysis, and to propose profiles by analyzing the answers of each interviewee, which will be done through the vertical analysis. Subsequently, we will proceed to the crossing of the profiles with the synthesis of the themes, to be able to answer our research objectives and to reach satisfactory results by supporting it with a discourse analysis using the Tropes V8.4 software.

4. Results:

Our semi-structured interviews conducted within the three companies are dedicated to the contribution of e-learning in the performance of companies during Covid-19 has brought out several results. We will proceed to the presentation and discussion of the results we received from our interview guide with the interviewees who allowed us to benefit from their knowledge and professional experience.

a) Results of the analysis by topic:

We will therefore present in this section the summaries of the results we obtained following the analysis of each of the three themes constituting our interview guide.

➤ E-learning in companies:

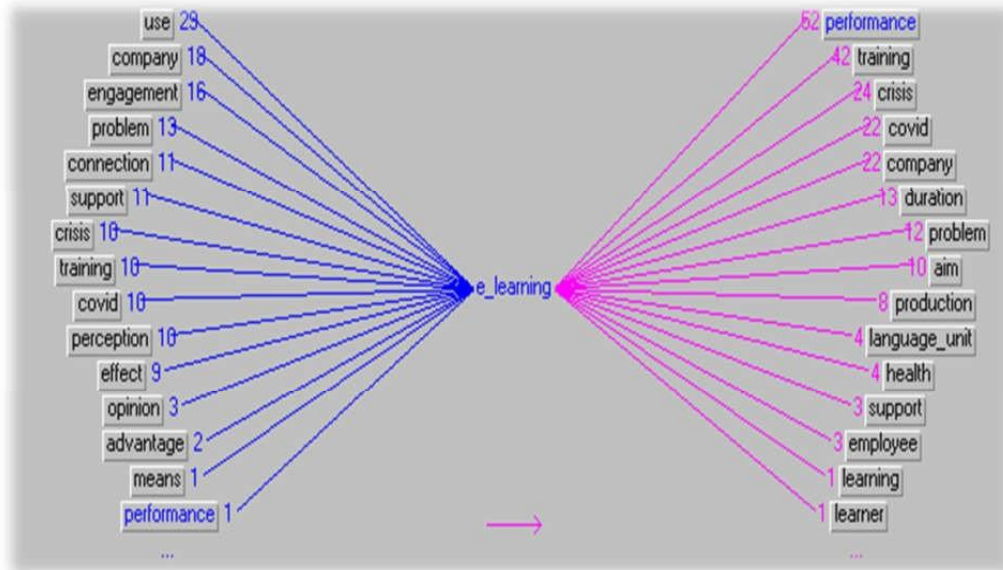
During our work, we have considered it necessary to clarify the situation of e-learning in general before exploring the phenomenon under study in greater depth, since it represents the global vision of our research. Some of the interviewees are very confused about the definition of e-learning, attributing it to the terms "learning" and "training".

"It's all the solutions and means that allow learning through electronic means." (Interviewee 9).

"It's an online training." (Interviewee 7).

This figure shows us the simultaneous presence of several words in the same statement. In our case, elearning is attributed to the term learning and training in the interviewees' responses.

Figure N°1: The number of relationships (co-occurrence frequency) existing between the references.



Source: Made by Author in Tropes V8.4 (Star Graph)

E-learning as a whole represents an added value for companies, the advantages that can bring are more than its disadvantages, it allows the company to reduce its costs, ensure flexibility of training to employees and time management, while the main disadvantage according to the interviewees is the lack of interaction between the trainer and the learner.

"For the advantages, we can say that e-learning allows a reduction in costs, the autonomy of participants, for the disadvantages: lack of exchange with the trainer." (Interviewee 4).

The companies studied use Google Hangouts, Skype, Zoom, or other training platforms to provide online training. The use of these means of communication is initially due to their ease of access and handling as well as the possibility of recording the training.

"Hangouts allow easy usage, the ability to record the training, share screen and to take over on another pc to help the teleconsultants." (Interviewee 3). This ease of handling the computer tools reflects the satisfaction of the teleconsultants with the use of e-learning.

With all that has been indicated, e-learning is taking more and more place in the workplace with the daily use of social networks and new communication and information technologies. "Yes, E-learning will become more sustainable over time, more and more trainers and companies have adopted it, some achievements still need to be made to reduce the limitations of this style of training as much as possible." (Interviewee 15).

To conclude this first analysis, we can say that the context of crisis is putting pressure on companies to adopt e-learning to ensure continuity of training and production and a better confrontation of the crisis.

"Yes, on the one hand, e-learning has made it possible to overcome Covid-19 issues and be safe by allowing continuity of training." (Interviewee 1).

➤ E-learning in times of Covid-19 crisis:

The 2nd topic will be the perception of training and quality managers towards e-learning during Covid19.

Online training represents a model of e-learning used by companies in times of global crisis (whether financial, health, etc.), the only difficulty being the technical problems of equipment or connection. "Apart from the technical problems with connectivity, everything was fine." (Interviewee 17).

The difference between synchronous and asynchronous training lies in the cost of each, interaction, time commitment, and flexibility. First, face-to-face synchronous training is more expensive, more involved, and requires more training time. However, interaction and communication are still important factors in the learning process of teleconsultants and this is only valid for classroom training.

On this point, the majority of the interviewees would like to see hybrid training (distance and classroom) to keep in touch with the learners. "In my opinion, hybrid training is still the best because it combines both face-to-face and distance training." (Interviewee 3).

It can therefore be said that e-learning represents an alternative to traditional training, especially during the long global quarantine period of Covid-19, when the condition is to make it more accessible to learners, which is recognized by the interviewees who confirmed that e-learning allows them to overcome the pandemic limitations.

➤ E-learning as a means of corporate performance in times of Covid-19 :

Finally, the 3rd topic is the main part of our study, it represents the link between the 1st and the 2nd topic which will allow us to know the existing link between e-learning and the performance of companies, the subject of our study.

E-learning has enabled the companies studied to overcome the global pandemic and represents a means of business performance. This figure shows us how performance is related to the company in the cases studied, the term distance learning (or e-learning) is repeated quite a few times in the answers of the interviewees, which reflects that e-learning is a relationship between these two notions.

"The distance between the central class and the other classes is proportional to the number of Relations connecting them: in other words, when two classes are close together, they share many Relations, and when they are far from one another, they share few Relations" (TropesV8.4).

Figure N°2: The relationship between performance and company.



Source: Made by Author in Tropes V8.4 (Area Graph)

E-learning is not only effective but also efficient. In terms of results and objectives, e-learning is effective because the objective of companies is to continue their training and production activities. At the same time, it is efficient in terms of results and resources, since online training is less expensive than classroom training.

Besides the financial performance, e-learning ensures an organizational performance, it allows an acceptable level of training quality by adopting new learning methods through ICT, flexible learning since learners can choose the time they want to learn, flexible communication tools as well as time management of the training, in other words, the time spent for online training is less than the one in the classroom.

In conclusion, a set of recommendations for companies on how to use e-learning to improve performance and achieve quality learning:

- ✓ Provide the necessary material to carry out the training.
- ✓ Conduct training sessions on e-learning for all employees (including the trainer) and on the proper use of the tools, so that they can master them.
- ✓ Ensure that all employees have stable access to their Internet connection.
- ✓ Set up an IT team (technicians...) to resolve all technical blockages (create a platform between employees and IT to inform them of technical concerns).

➤ Results of the analysis by interviewees:

After having proceeded to an analysis made by topics constituting our interview guide, we proceeded to an analysis by each person interviewed. We were able to identify a typology of interviewees from each manager as follows:

- ✓ Leaders leaning towards synchronous learning:

These are managers who adopt a policy of face-to-face training in the classroom or via video conferencing. The main objective of these managers is to train teleconsultants in an atmosphere of interaction and contact with each other, to develop learners' knowledge and skills, and to create instant feedback.

Indeed, this strategy is more costly and time-consuming than asynchronous learning, as it gives more attention to the individual and requires daily follow-up of the latter, and this type of learning does not allow to go beyond the actual problematic period since it requires a presence in real-time, especially in the classroom.

✓ Leaders leaning towards asynchronous learning:

This category includes managers who prefer asynchronous learning, which is the type of learning encountered when content (videos, courses, etc.) is created and published online. Indeed, this type of learning does not allow for interaction between the trainer and the learners, but unlike synchronous learning, it is less costly, the telecommunicators can learn at their own pace and it requires little time to learn.

✓ Leaders leaning towards blended learning:

Finally, this category of managers is the most present in our research, which confirms what we have discussed at the conceptual level. Blended learning is the perfect model for companies as it combines aspects of synchronous and asynchronous training according to the company's needs. This type of learning is more flexible than the others and shows that e-learning is a sustainable option for an option for companies and not in a crisis context.

We can therefore classify these managers according to their typology in the following table:

Table N°2: Typology of source managers

Types	Leaders leaning towards synchronous learning	Leaders leaning towards asynchronous learning	Leaders leaning towards blended learning
Profiles	Profile N°4 Profile N°5 Profile N°6 Profile N°11 Profile N°12	Profile N°2 Profile N°7	Profile N°1 Profile N°3 Profile N°8 Profile N°9 Profile N°10 Profile N°13 Profile N°14 Profile N°15

Source: Made by the Author

Conclusion

This work highlights the e-learning that can develop within companies, especially amid a financial and health crisis such as the Covid-19 pandemic. After examining the different meanings of e-learning, its advantages, and disadvantages, its contribution in the context of crisis as well as its contribution to the performance of companies, we proceeded to the exposition and discussion of the main results we obtained.

To collect our data, we conducted individual face-to-face semi-directive interviews with the managers of three companies in the field of outsourcing and transaction management (BPO) in Morocco, which allowed us to compare the results obtained with what we have dealt with in our theoretical part. We then analyzed each category of interviews, dividing them into themes and sub-themes about the research axes and the theoretical schematization already presented. We then responded to each category by illustrating with verbatims taken from the discussions with our interviewees. This allows us to give more concreteness to our work.

This analysis allowed us to draw several conclusions related to the problem while checking whether it conformed to the results of our theoretical part. The use of e-learning remains an important variable in general, especially during the crisis, as it represents an alternative to standard training for the company and provides learners with a certain comfort and flexibility.

APPENDICES: Interview guide

Target: Trainers, training managers, and quality managers.

In the context of our article entitled "The impact of new technologies "e-learning" on the productivity of companies in a period of crisis", I conduct a field study with three different companies. This research will focus on the contribution of e-learning to the performance of companies during the Covid-19 period. This is the reason why I contacted you to interview about 45min to have your point of view concerning these issues.

Respondent presentation:

- 1- Can you introduce yourself? (Name, age, position in the company)
- 2- When did you join the company?
- 3- How long have you held this position?

I. E-learning in companies:

- 1- In your opinion, what is e-learning?
- 2- Have you ever considered using e-learning to train employees?
- 3- What is your perception of e-learning? (Advantages and disadvantages)
- 4- What means of communication have you used for training? (Via Zoom, a training platform)?

- 5- What is your perception of the use of new information and communication technologies (means by which the training is established)?
- 6- How is the e-learning mode perceived by teleconsultants in general?
- 7- Do you think that there have been important developments in recent years in companies regarding the use of e-learning for on-the-job training?
- 8- Has e-learning helped you to overcome the pandemic limitations while maintaining the same level of performance?

II. E-learning in times of crisis:

- 1- Did you encounter difficulties in training during Covid-19, especially during the global quarantine?
- 2- Do you believe that these training programs, including the one offered by your company, can be offered completely or partially at a distance using e-learning?
- 3- What training models would be desirable in your case? Completely online, Hybrid (distance and classroom), or entirely classroom-based.
- 4- In your opinion, what is the difference between synchronous and asynchronous training, and what is its impact on the learning process of the teleconsultants.
- 5- Do you think that online training is an alternative to standard training?
- 6- Do you plan to consider this kind of training as a sustainable solution and not only in a crisis context?

III. E-learning as a means of corporate performance in times of crisis :

- 1- In your opinion, does e-learning contribute to company performance during the global pandemic?
- 2- In conclusion, what recommendations would you make to companies to increase their use of online training methods such as e-learning for employee training?

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