

Master Thesis Double Degree program in Innovation and Industrial
Management

**LIFELONG LEARNING IN ORGANIZATIONS,
BEFORE AND AFTER THE COVID-19 PANDEMIC**

A multiple case study on large enterprises in the manufacturing industry

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Lifelong Learning In Organizations And The Impact Of The Covid-19 Pandemic

A multiple case study on large enterprises' attitude toward continuous learning, how it was affected by the Covid-19 pandemic and what are the trends for future corporate training and development.

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Abstract

Given the current challenges companies have in remaining relevant in a dynamic and challenging market environment, a more serious attention should be addressed to the concept of continuous learning in the training of employees. In addition, the current pandemic opened up new scenarios for training practices, which might be completely re-adapted for the upcoming years.

Considering these phenomena, it is interesting to find out what are the training practices through which enterprises are trying to deliver long term development of employees but also to what extent these practices were affected by the current Covid-19 pandemic and eventually adapted. This will be achieved by interviewing professionals in corporate training. As a matter of fact, the aim is to get insights about how the sampled organizations are currently dealing with lifelong learning in training, but also how they are planning to reorganize themselves after the current pandemic.

Going in detail, the research studies the approach of five large enterprises operating in the manufacturing industry with the purpose of finding similarities and differences in terms of practices, attitudes and beliefs in the field of continuous education. Furthermore the research aims to analyze the impact the pandemic had on the training and development activities and what are believed to be the future trends on the field. The sampled companies are chosen due to their size and consequent effort in promoting continuous education as declared learning organizations. Indeed, larger-in-size companies tend to have more structured Training and Development departments, therefore there is a high chance they might be involved in continuous education activities. In conclusion, the research is conducted with the support of First to Know Scandinavia AB, a consultancy company specialized in sustainability and innovation.

Among the key findings are a higher dependence on technologies linked to the transition to digital learning platforms, blended approaches between digital and in-presence training and the need of a more customized, bite-sized and just-in-time approach to learning and development.

Keywords: Lifelong Learning; Continuing Education; Training; Learning Organization; Covid-19

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List of Abbreviations

- CE – Continuing Education
- T&D – Training and Development
- IVT - Interactive Video Training
- IT – Information Technology
- LMS – Learning Management System
- KPI - Key Performance Index
- L&D – Learning & Development
- ILT – Instructor Led Training

1. Introduction

In a dynamic and challenging business environment companies need to consequently build dynamic capabilities in order to maintain their relevance in their industries. In order to do so, a “learning organization” can represent an important starting point. The idea of “learning organization” initially originated in the business environment has then spread across education and training, public and private sectors and on a local and foreign scale. A learning organization is an organization skilled in the creation, acquisition and transfer of knowledge and in adapting to reflect new knowledge and insights. The basis for a learning organization is that new ideas are essential for learning to take place, they can be brand new and coming from within the company, while sometimes they can be outsourced from outside of the company. Whatever the source, this idea represents the trigger for organization improvement but it’s not enough to build a learning organization. In fact, improvement has to be sustained by organizations by accompanying changes in the ways work gets done (Garvin,1993). This concept represents a bridge with an outstanding topic of our century in the field of education and training for adults that is “lifelong learning”. Just as the learning organization, lifelong learning represents a condition for continuous vitality in companies given that the main focus relies on the promotion of a continuous open-ended learning for their members (Barry J. Hake, 1999).

A strong implication is that lifelong learning dramatically affects the vitality of companies and that companies should put effort in fostering and promoting an environment which keeps stimulating it, leading to more creative and motivated individuals (Walker, 2001). When it comes to continuous learning, there are several types of training that companies can provide for employees, from Soft Skills to Technical, Managerial and Safety ones. In all situations, a variety of training types will be used, depending on the type of job (University of Minnesota, 2016). Furthermore, the new progresses in Information and Communications Technology (ICT) opened up new frontiers and means, now available to companies, for lifelong learning to take place. Indeed, many organizations are starting to switch to digital environments for what concerns the education and training of their employees. Finally, the previously mentioned innovations in ICT helped organizations to cope also with the current Covid-19 Pandemic by sustaining distance working and training, therefore, the research will also keep in consideration this recent framework.

1.1 Research Problem

Building a learning organization by promoting and sustaining lifelong learning initiatives can play a crucial role for fostering and guaranteeing vitality and relevance within organizations. Education and training in organizations can vary from company to company because of multiple factors such as culture, strategy, industry but also due to technical limitations.

With the advent of the Covid-19 pandemic, habits and processes within companies were dramatically affected, having the workplace and many operational activities to adapt to a digital based environment. Due to this, the current situation evidences how a set of new innovative solutions is required to introduce and foster lifelong learning in organizations. This would support them in maintaining long term relevance in the business environment. In addition, a clear picture of how companies are adapting their training and education offering to this unstable situation is missing. Thereby, it seems interesting to study what companies' general strategic approach toward lifelong learning is, how and if it has been affected by the current pandemic, keeping an eye on future trends. A preliminary analysis of the author about the presence of reliable and relevant literature in this specific sphere of interest revealed that little empirical research has been conducted about how organizations are approaching lifelong learning. Indeed, the processes concretely adopted by companies to implement lifelong learning appears not sufficiently addressed by scientific literature.

In order to address this issue, the researcher, with the help of First to Know Scandinavia AB (FTK), a consultancy company located in Gothenburg, decided to compare several large enterprises involved in the manufacturing industry. Five companies have been selected on the basis of the author and FTK's belief that they are working to implement and sustain lifelong learning in the workplace but also for their size. The companies are operating in different branches of manufacturing and with different business models, since this study seeks to understand how lifelong learning can be implemented in diverging business settings and how companies responded to the current Covid-19 crisis.

1.2 Purpose and Research Questions

The purpose of the research is to run a comparative study among multiple large enterprises operating in the manufacturing industry, in order to detect any congruences or differences in terms of practices related to lifelong learning fostering and responses to the pandemic. The main idea behind the research is providing an empirical-based overview of how companies are integrating lifelong learning activities within their workplaces in terms of innovative solutions. Furthermore, the study will not be limited only to that but it will also investigate whether the practices around this matter have been affected by the current pandemic and, eventually, collect perceptions of what are the future trends that will change the way T&D is delivered in organizations.

Research Questions:

RQ1: “How are enterprises introducing and fostering Lifelong Learning within their organizations?”

RQ2: “How were they affected by the current Covid-19 pandemic and eventually adapted?”

Sub Question: *“What future trends do companies perceive in the field of employees’ training and development?”*

The author is aiming to address this question through a Multiple Case Study on several large enterprises operating in the manufacturing industry. Furthermore the study is supposed to collect the organization’s perspective and not employees’ ones.

Additionally, given that the Covid-19 pandemic is a relatively recent phenomenon, the lack of research on these aspects make it more interesting to explore the influence it had on corporate training.

1.3 Delimitations

To preserve the quality and consistency of the work, boundaries for the research are set. From a size point of view, large enterprises are selected as the focus of the research. For large enterprises the author considers different aspects, such as the number of employees (>5000), and an annual turnover greater than 1.5billion euros and a balance sheet total of more than 2billion euros. These criteria have been defined by implementation decree No. 2008-1354 or Article 51 of the law on modernization of the economy, relating to the criteria which allow for the definition of the class to which a business belongs for the purposes of statistical and economic analysis (INSEE Website). Moreover, the considered companies are operating in the manufacturing industries, but in different branches of it. This choice might be debatable due to the risk of having biased results connected to this aspect. Nevertheless the researcher is convinced that the type of skills involved are shared among all the companies, therefore this detail should not affect the outcome of the research. Indeed, in opposition to that, the outcome might be more valuable to see whether these different market involvements actually bring diverse outcomes with them. Furthermore, the research is not going to investigate in depth the insights related to each practice but rather it is going to provide a general framework on how the sampled companies are dealing with lifelong learning. The geographical aspect is not considered since the size of the sampled companies implies that the training and developing initiatives would be shared among entire regions or worldwide.

Finally, the researcher thinks that, taking into consideration the previously listed limitations, the research can lead thanks to the collected data to comprehensive conclusions and valuable answers to the research questions.

1.4 Research Structure

The author organized the study in six main chapters. The first chapter represents an introduction to the research presenting the background, the research problem, the purpose and research questions and the delimitations in conclusion. The second chapter is constituted by the literature review of previous research chosen by the author to constitute a basis and to support the empirical findings. The third chapter concerns the methodology used for the research. It will go through the choice of research strategy, the research method, the research design and the criteria for data collection and analysis. Chapter four will be for the presentation of the empirical data collected with the aim of answering the research questions. Chapter five will be instead focused on the analysis of the data presented in the empirical findings. In conclusion, chapter six will be about the discussion and the presentation of the answers to the research questions, followed by suggestions for future research but also the presentation of the key findings of the research.

2. Literature Review

This chapter presents the theoretical concepts connected to the context of this study. Firstly, an explanation about the Learning Organization is given. Afterwards, Lifelong Learning is presented through the concept of Continuing Education, that represents the most used practical application of it. The way in which an organization can support continuing education is then presented. To conclude the researcher focuses on what is training, what are the forms it could take place and the forecasted approaches that could take place in the future. At the end of the chapter a summary table is inserted (Table 9).

2.1 Learning Organization

2.1.1 Definition and concepts

The work from Mills and Friesen (1992) defines the learning organization as an organization able to handle internal innovation with the purpose of improving quality, enhancing customer or supplier relationship or supporting business strategies related to profitability. According to Pedler et al. (1991) a learning organization is “an organization that facilitates the learning of all its members and continuously transforms itself”. What Pedler is trying to say in his work is that a learning organization is an active organization willing to leverage the knowledge of its members in order to improve the company’s overall capability to change.

According to Pedler et al. (1991) a learning organization should have different characteristics. Among these there are self-development opportunities for all members, a learning climate promoting experimentation and experience learning and information systems allowing members to make decisions based on data available.

Senge has a different view on learning, since according to him it involves a shift starting from the members developing knowledge on specific disciplines rather than the management or team. The mentioned disciplines are systems thinking, personal mastery, mental models, building a shared vision and team learning (Senge, 1990).

Works from Di Bella and Nevis (1995) discuss how learning takes place in any organization, therefore any organization can be defined as a learning organization. On the other hand, other scholars (Senge, 1990; Pedler et al., 1991; Garvin, 1993) agree that learning organizations have specific characteristics. Among the ones listed by Calvert et al. (1994) and Watkins and Marsick (1993) companies offering continuous education opportunities, having learning as a mean to reach

goals and fostering a climate of risk taking and participation by promoting creativity and awareness.

Mills and Friesen (1992) identified three main features that a learning organization has. The first is *Commitment to Knowledge*, meaning that learning should not start exclusively from companies spilling knowledge to its employees, because they would give the idea that no knowledge exists outside of the organization’s boundaries. The second are *Mechanisms for Renewal*: often it happens that individuals have difficulties in demonstrating their potential due to the system in which they are embedded, which is at fault. For this reason, firms have to overcome bureaucratic rigidity, making it impossible for the firm to adapt and to learn. The last one is *Openness*, according to which the organization has to understand what is happening outside of its boundaries in order to be responsive to change.

Table 1 - Main Definitions of Learning Organization; re-elaborated by the author

<p>Calvert et al. (1994) and Watkins and Marsick (1993)</p>	<ul style="list-style-type: none"> ▪ <i>Offering CE opportunities;</i> ▪ <i>Having learning as the mean to reach goals;</i> ▪ <i>Organizational Performance associated to Performance;</i> ▪ <i>Fostering risk taking and participation;</i> ▪ <i>Promoting creativity and awareness;</i>
<p>Pedler et al. (1991)</p>	<ul style="list-style-type: none"> ▪ <i>Self-Development Opportunities for all members;</i> ▪ <i>Learning climate promoting experimentation and experience learning;</i> ▪ <i>Information systems allowing members to rely on data to take decisions;</i>
<p>Mills and Friesen (1992)</p>	<ul style="list-style-type: none"> ▪ <i>Commitment to Knowledge;</i> ▪ <i>Overcome bureaucratic rigidity to adapt and learn;</i> ▪ <i>Openness;</i>

When individuals interact in organizations, they detect possibilities to benefit from others, benefitting from their own and their peers' experience (Allen, 1996). Drawing from this, we can say that learning in organizations happens when companies enhance the possibility for its employees to learn on both the individual and organizational side. Another characteristic of the learning organization is being flexible, this gives employees the possibility to get involved in the company's strategy planning and decision processes (Senge, 1990; Pedler et al., 1991; Handy, 1992b). This degree of freedom linked to flexibility allows employees to be proactive in the organization and to develop capabilities making them able to cope with a dynamic and challenging environment (Allen, 1996).

Teamwork also represents an important detail to focus on when talking about learning organization, since knowledge in an organization can be shared across its members. The idea behind that is that no member is required to know everything about the job, therefore sharing knowledge with other members can be crucial to carry out tasks (Allen, 1996). Communication plays an important role in learning as well, since a communication strategy involving all the organization's dimensions can result in a higher feeling of involvement, consequently in higher performances (Allen, 1996; Watkins and Marsick, 1996). The duty of the learning organization is to remove any obstacle that might affect smooth communication all over organization members. Finally, failure, considered as mistakes or errors, can represent an efficient way in which organization members can learn, since it is something taken into account when change is involved (Akbar, 2003; Nonaka and Takeuchi, 1995; Starkey, 1998).

In conclusion, distinction has to be made between learning organization and organizational learning. As suggested by Symon (2002), the concept of learning organization has been drawn from organizational learning. In a learning organization the focus is mainly on a desirable goal while in organizational learning the focus relies on the management of activities that can directly affect the organization (Finger & Woolis, 1994).

Table 2 – Features and benefits of a Learning Organization; re-elaborated by the author

Flexibility	<i>Allows employees to be proactive in the organization and to develop capabilities making them able to cope with a dynamic and challenging environment (Allen, 1996)</i>
Teamwork	<i>Knowledge in an organization can be shared across its members. Sharing knowledge with other members can be crucial to carry out tasks (Allen, 1996)</i>
Communication	<i>A communication strategy involving all the organization's dimensions can result in a higher feeling of involvement, consequently in higher performances (Allen, 1996; Watkins and Marsick, 1996)</i>
Failure	<i>It can represent an efficient way in which organization members can learn, since it is something taken into account when change is involved (Akbar, 2003; Nonaka and Takeuchi, 1995; Starkey, 1998)</i>

2.1.2 The effect of learning from Individuals, to Groups, to Organizations

Individuals are not the only ones needing lifelong learning. Indeed, groups and organizations need continuous learning as well. The baseline is that individuals can affect through their learning the overall organization. In fact, we should consider that the considered systems represent a holarchy (Koestler, 1967; Wilber, 1995). For holarchy it is meant a set of interdependent layers completing each other, where any level can eventually condition another. For this reason, individuals can trigger learning in groups and organizations by learning themselves; and the opposite is true as well (London, 2011).

From the study by Crossan, Lane and White (1999), 4 baselines on organizational learning can be drawn. First, organizational learning reaches all the dimensions of the organization: from the individuals' ones, to groups' and the organization's itself. Secondly, those three dimensions are linked to four processes, which are: *Intuiting*; *Interpreting*; *Integrating*; *Institutionalizing*. In terms of learning the first two are seen on an individual-level. *Integrating* instead is seen on a group-level and *institutionalizing* is seen on an organizational-level.

Third, the transfer of knowledge happens back and forward from the organization to individuals and vice versa. The last baseline is that organizational learning involves the organization's capability to obtain new knowledge (exploration) and to manage existing knowledge (exploitation). Lastly, organizational learning involves a mix of exploration and exploitation, between new learning and what is already learnt (London, 2011).

Table 3 - Learning from an Individual Level to an Organizational one; re-elaborated by the author based on Crossan, Lane and White (1999)

Process	Description	Category of learning
<i>Intuiting</i>	Developing new insights	Individual-Level
<i>Interpreting</i>	Fix the insights in a cognitive map	Individual-Level
<i>Integrating</i>	Sharing individuals outcomes to groups	Group-Level
<i>Instituzionalizing</i>	Implement individual and group level in the Organization's systems	Organization-Level

2.1.3 The New Learning Organization

In order to survive today, companies need to rethink the way they operate. Business structures indeed are now assuming the features of open networks and digital environments with less organizational boundaries, therefore more reliance is given to outsourcing resources, gig forces and services. The new learning organization is a living organizational ecosystem that intelligently facilitates the performance and learning of its members continuously transforming itself (Towards Maturity, 2017).

Based on the report made by Towards Maturity and authored by Jane Daly and Laura Overton (Daly and Overton, 2017), the main features of a new learning organization are six. The first is *Clarity of Purpose*, by ensuring that both Individuals and line managers collaborate and are aligned in setting objectives and defining opportunities to encourage individuals in taking accountability for their professional development. The second is a *Holistic people experience* boosting long term employability across all the levels of the organization by guaranteeing continuous development of skills and knowledge, to ensure them to be a fit for the company and for their future professional

experiences. The goal is to extend employability by guaranteeing longer career paths and taking care of the professional development of the individual for his future. The third is a *Thriving Ecosystem*, by allowing individuals to actively participate and contribute to the organization’s activities and to challenge others’ thinking. The fourth is an *Agile digitally-enabled infrastructure*, by ensuring agile work is pursued guaranteeing that the right people are assigned to the right team whose mix of skills are supported by the right technologies to boost their impact. The fifth is an environment characterized by *Continual engagement*, by comprehending the importance of reserving time for employees to allow them to work on their personal development. Creating a culture promoting learning can create better engagement and thus creation and holding of competitive advantages. The fifth is *Intelligent decision-making*, by making individuals comfortable in difficult situations in order for them to properly analyze scenarios and to be able to cope with change with a proactive response.

Table 4 - The New Learning Organization; based on Towards Maturity, 2017

<i>Clarity of Purpose</i>	<i>Aligned objectives to encourage individuals in taking accountability for their professional development.</i>
<i>Holistic people experience</i>	<i>Boost long term employability by guaranteeing continuous development possibilities.</i>
<i>Thriving Ecosystem</i>	<i>Encourage active participation.</i>
<i>Agile digitally-enabled infrastructure</i>	<i>Right players for right teams and supported by the right technology to support their impact.</i>
<i>Continual engagement</i>	<i>Reserve employees time for their personal development.</i>
<i>Intelligent decision-making</i>	<i>Make individual comfortable in difficult situation to make them able to analyze scenarios and cope with change.</i>

2.2 Lifelong Learning

2.2.1 Concepts and Definitions of Lifelong Learning

Despite the concept of Lifelong Learning being spread out worldwide for almost a century, there is still confusion when it comes to providing an exact definition to it. One popular definition considers lifelong learning as the development of an individual after formal education, i.e. the process of continuous development of skills and knowledge acquisition that an individual experiences after formal education and throughout his life (Encarta, 2008). Lifelong learning builds up the possibility of building from previous knowledge a broader one with a wider set of skills. The main concept behind lifelong learning is that an individual's knowledge cannot be constrained only to his formal learning period, and this makes it necessary to empower people to manage their learning in various contexts since the pre-matured would not be sufficient towards its life (Sharples, 2000, p. 178; Bentley, 1998).

Another common definition of lifelong learning considers it as “all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective” (European Commission [EC], 2001, p. 9). This definition has been furtherly developed by Jarvis (2006, p. 134), who considers lifelong learning as the combination of processes throughout a lifetime through which the individual constantly processes his social situations and experiences from both an emotional and practical point of view social situations, and absorbs them resulting in a continually changing person.

According to Knapper & Cropley (1991), the meaning of lifelong learning is also influenced by geographical implications. In fact, it seems that while in the United States lifelong learning has been considered simply as a new technical term for adult education and linked with “alternative” educational activities such as educational brokering, in Europe it is strictly connected to the link between learning and work. Furthermore, Knapper & Cropley (1991) also distinguish lifelong education and lifelong learning, considering the first as “a set of organisational and procedural guidelines for educational practice aimed at fostering learning throughout life” (Knapper & Cropley, 1991). Career-related continuous learning is often considered as an alternation of formal and informal activities that individuals engage in overtime to promote their career development (London and Smither, 1999a). Self-direction in lifelong learning is another aspect that is often defined considering four dimensions: personal autonomy, autonomous pursuit of learning independent of formal institutions, willingness to balance effort in learning, and individual control of the learning process (Candy, 1991). One of the main challenges for adult educators is indeed helping learners to enhance their self-directedness. Other factors influencing the creation of a

learning society are government policies boosting knowledge development, developments in technology, learning and economic growth (Edwards, 1997). As London (2011) remarks, open and distance learning, inclusiveness and participation should be central to adult education if learning and learners' capabilities are to be put centre stage.

Finally, according to Field (2006), lifelong learning can be considered as a new educational order, analysing in his work how governments are actively trying to support it through government policies aimed at encouraging adult commitment to learning across the life span in order to achieve a learning society.

Table 5 - Lifelong Learning Definitions; re-elaborated by the author

Encarta (2008)	Process of continuous development of skills and knowledge acquisition that an individual experience after formal education and throughout his life
European Commission [EC], 2001, p. 9	All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective
Jarvis (2006, p. 134)	Combination of processes throughout a lifetime through which the individual constantly processes his social situations and experiences from both an emotional and practical point of view social situations, and absorbs them resulting into a continually changing person
London and Smither (1999a)	Career-related continuous learning as a pattern of formal and informal activities that people sustain over time for the benefit of their career development

2.2.2 Participation in Continuing Education Programs

Many adults see in Continuing Education (CE) the most concrete and accessible way to lifelong learning. Continuing Education is considered as any form of learning that takes place after the

formal period for working adults (Brooks, 2006; Chen & Klimoski, 2007). In every scenario, CE programs are aiming to provide working adults with job and career relevant knowledge (Kraiger, 2003; Salas & Cannon-Bowers, 2001). Despite its origins from the traditional education settings and means, CE practices can be pursued to a wider range of opportunities (Aspin & Chapman, 2000; Garrison & Kanuka, 2004). While books and articles are still widely used in CE, new alternatives such as distant learning, interactive internet programs, simulation, blogs, journals and many more are getting popular among organizations (Moore & Kearsley, 1996). Furthermore, despite CE being offered in the standard scenario with pre scheduled time sets and classrooms, a considerable amount of programs are being offered on a self-paced basis, outside of the workplace and outside of the working hours boundary (Fordis et al., 2005).

The extent to which organization members participate in CE depends on the company where they work. Participation indeed, can be mandatory, being required by professional licensing groups, organizational policies or supervisors mandates. But this is not the only case, in fact, participation might also be self-influenced, having the members deciding for themselves how much they want to continue education. In the latter case, participation for organization members depends on how much they think the training can be impactful, the design of the CE program, but also on the amount of support and peer review they can receive (Lamb & Brady, 2005; Salas & Cannon-Bowers, 2001). When talking about CE we have to make a clear distinction with Job Training. The latter indeed, is commonly offered by the employer to his employees to enhance job-related skills, while on the other hand, CE can comprehend both job related and non domains, being job-specific or generic.

2.2.3 Role of Organizations in Continuing Education

Organizations can foster and support the effectiveness of continuing education in two ways. First, they can provide employees with a wide range of opportunities of access to CE in order to stimulate their participation (Goldstein, 1991). Secondly, they can simplify the transfer of concepts acquired through CE to the job-setting (Baldwin & Ford, 1988; Bransford & Schwartz, 1999; Kozlowski et al., 2001).

Going into details, the main dimensions on which organizations can play a crucial role for continuing education rely on working on the *Level of Access and Encouragement* and the *Level of Transfer of Learning*. In the first case we should make a distinction between *Environmental Factors* and *Institutional Factors*.

2.2.4 Level of Access and Encouragement

2.2.4.1 Environmental Factors

When it comes to environmental factors, the industry in which the company operates can play a crucial role, since apparently companies in the service industries were discovered to be more prone to offering continuing education opportunities compared to the manufacturing industry (Goldstein, 1991; Kauffman, 1999). The reason behind that might rely on the fact that companies in the service industry face a more dynamic and fast-changing environment, therefore they are incentivized and somehow have the necessity to provide continuing education opportunities to their employees, in order to maintain their relevance in the market. When it comes to manufacturing, it might be more difficult to pause daily activities to provide such training. Another factor impacting learning is the change in technology, in fact, companies exposed to a consistent technological change and technological intensity are more likely to CE activities (Lamb & Brady, 2005; Locatis & Weisburg, 1997). In this case, the necessity of providing CE comes from the necessity of employees to be up to date for any development in the technologies they are working with. On the other hand, the technology intensity is strictly related to the range of CE opportunities that can be offered, having easier access to training programs through electronic devices.

The Macroeconomic environment has also a considerable impact on the extent to which companies offer and promote CE opportunities (Blundell et al., 1999; Feldman & Ng, 2008). If there is an overall negative shock in the stock market, organizations might find themselves in a situation of resource scarcity in which they might not be able to offer CE because it might not be considered as a priority. This is not always the case, since the latest recessions showed how economic slowdowns were associated with an increase in individuals enrolling in MBA programs or companies introducing new long-term training programs. Also, the business environment also influences the need for CE. If a company needs to adapt to a new market, like for example when many organizations had to transfer their activities in an online digital environment, then the need to promote CE will be high, in order to provide the employees with all the knowledge they need to tackle the new challenges.

2.2.4.2 Institutional Factors

Offering and sustaining continuing education can be really expensive for companies, whether they have it in-house or if they outsource it (Brooks, 2006; Gerwitz et al., 1995). For this reason the company size can impact the possibility of providing CE programs, since larger companies are more likely to have more structured Training and Development (T&D) departments and therefore offer more opportunities for continuing learning. This is possible thanks to economies of scale that

large companies can achieve in offering training programs, furthermore, T&D groups are often advocates for delivering CE to improve organizational effectiveness (Hamburg & Lindecke, 2004).

From an environmental point of view, the last factor to mention affecting the access to continuing education in organizations is the company strategy (DeRouin, Fritzsche, & Salas, 2005; Dipboye, 1997). For the sake of illustration, it appears that companies that compete on costs are less likely to invest in CE compared to companies that compete on quality (Bersin, 2002; Spencer, 2004). The reason why companies competing on quality tend to invest more in CE is that it could result in an efficient service resulting directly in a higher customer satisfaction.

2.2.5 Level of Transfer of Learning

2.2.5.1 Task Specific and Generalizable Skills

For what it concerns training covering technical aspects, then knowledge transfer is likely to occur in situations in which CE is directly applicable to the task that needs to be performed (Gopher, Weil, & Bareket, 1996). Nevertheless, this transfer of knowledge is not so straightforward when it comes to management development, in training organization members to adapt to new positions in different organization units on a long term horizon (Baldwin & Ford, 1988). When it comes to management development, research showed that providing employees with knowledge they can test on field is more effective for the transfer of knowledge, while having supervisors and colleagues discouraging individuals from testing new approaches in the workplace might result, on the contrary, in a little transfer of knowledge (Eraut, 2004; Gray, 1987). Finally, another strategy that appeared to be effective was providing employees with the opportunity to share their experience and acquired knowledge with other members of the organization (DeRouin et al., 2005; London & Sessa, 2007).

2.2.5.2 Trainers and Trainees Heterogeneity

There is no research yet assessing the relationship between trainers effectiveness and whether they were based within or outside the company, and also, if the considered trainees were from the same company or from a different set of companies. What we can hypothesize is that trainers that are inside the company, with an audience of in-house trainees, might be more effective in providing clear frameworks with direct application for practices that are already common to the organization members. This might be possible thanks to the fact that both trainers and trainees would be on the same page when tackling a specific issue but also, the same education material could be used. But we should keep in consideration that trying to come up with new solutions with only people from

inside the company might restrict the arrangement of solutions that could be found mainly due to peer pressure. Individuals indeed might feel insecure in giving feedback or propose any solution on their own being afraid of being judged or limited. For this reason, outsiders providing training to a heterogeneous group of trainees might result in a more interactive scenario where the array of strategies for transferring knowledge could be wider (Bransford & Schwartz, 1999; Feldman, 1989).

2.2.5.3 Organizational Culture

Also organizational culture can play a crucial role in promoting knowledge transfer related to CE activities (Boud & Falchikov, 2006). Previous research evidenced how organizational value supporting continuous learning and improvement processes positively affect organization members' transfer of knowledge (Hager, 2004). On the other hand, employees can be less incentivized to engage in self-development activities or to transfer knowledge when they perceive that the company is making a small effort in offering continuous learning opportunities (Garrison & Kanuka, 2004).

2.2.5.4 Monitoring Attendance and Performance

Research on CE investigated what are the implications of organizational control systems on the effectiveness of CE programs. The result of the studies showed that companies that monitor attendance and performance in CE activities are more likely to positively influence the transfer of knowledge between the members of the organization (Boud & Falchikov, 2006; Hummel et al., 2005). The reason for that to happen can be connected to the fact that monitoring can directly influence attendance in activities related to CE, resulting in a larger group among which knowledge can be transferred. Monitoring can also lead to higher organization members' commitment towards CE activities, resulting in better overall results. Monitoring can also take the form of setting performance criteria and providing trainees with incentives to perform in the after-test assessments.

2.3 Training

2.3.1 The concepts of Training and Development

Despite being often associated with each other, Training and Development are two different concepts. Research by Bohlander and Snell define training as any initiative by the organization to support learning between its members (Bohlander & Snell, 2010). Other works from (Noe, Gerhart, Wright, 2009) and (Rothwell and Sredl, 2000) instead, define training as a short-term

solution through which organizations supports its members by letting them acquire specific knowledge, skills and know-how that they could directly apply in the workplace in order to achieve essential work results. On the contrary, development is defined in the work by Noe et al. (2009) as the acquisition of knowledge, skills and attitudes to make the employee able to tackle dynamic job requirements and demands by customers (Noe et al., 2009). When comparing training to development we should stress that the latter has a long-term dimension, planning to impact the whole career and abilities of an individual.

Training goals are to be set in advance by organizational leaders and must be clear and specific, this can be achieved by conducting performance analysis and training assessment, in order to avoid resource waste in investing in the wrong needed training. For this reason, training needs assessment pinpoints to point out what are the knowledge, skills and people needed to be tackled by training (Gupta, 1999). Besides resources, also the macro-dimension of the organization's environment and strategies are to be examined (Bohlander & Snell, 2010).

2.3.2 Training Categories

In this paragraph the main categories of employee training are presented, starting by classifying them according to where it is offered. The main categories are three: the first is *On-the-job training*, which is conducted in the workplace (Rothwell & Kazanas, 2004). About 90% of worker learning occurs on the job (Dulworth & Bordonaro, 2005). On-the-job training can also take the form of Apprenticeships and Internships, having the latter typically tied to academic programs and must be completed to obtain an academic degree. The second one is *Off-the-job training*, that is any training that is not conducted in the workplace. And the third one is *E-learning*, which considers any learning activity taking place entirely in a digital environment. There are other categories to mention, these are shown in Table 6.

Table 6 - Training Categories

<i>On-the-job training</i>	Is conducted in the workplace (Rothwell & Kazanas, 2004).
<i>Off-the-job training</i>	Any training that is not conducted in the workplace
<i>Vestibule training/ Near-the-job training</i>	Conducted near the workplace, but in a specific place, in order to make them concentrate on it coming out from their daily activities dimension
<i>Cross-training</i>	Makes employees experience other duties or work they normally not used to
<i>Blended learning</i>	Any combination of media and activities in presence to deliver instruction
<i>E-learning</i>	Any learning activity taking place entirely in a digital environment

2.3.3 How Training is delivered

The dualism between innovation in technologies and training have led to strong development in the delivery of training. These new improvements made it possible to overcome the standards of training delivery such as having a classroom setting. Overcoming these standard means can dramatically diminish delivery costs since training can now take place eventually online without the need of an instructor or facilitator. Nevertheless not all organization members find this training delivery method effective, therefore blended formats are used by many organizations. Blended formats give organizations a way of proposing a solution close to the standard delivery methods but with reduced costs (Rothwell et al., 2006).

Simulations are also becoming popular in the training processes. The idea for simulations is to propose digital environments that recreate live activities, in order to give the employee an empirical kind of training, even if done virtually. Simulations are a highly cost-effective training method for companies. Besides Simulations, also Adventure Training is becoming popular. This type of training involves taking employees on a trip outside of the workplace and presenting them challenges in challenging situations not related to their normal activities (e.g. Extreme Sports), to test their teamwork and their ability to adapt to dynamic environments (DeCenzo & Robbins, 2010). Among the other methods of training delivery we can have *Case Studies*, where participants

are presented with a fiction scenario of events that might occur in the future and have to use their matured skills and knowledge to solve the case; *Role Plays* where participants have to immerse in a role and act to show how they would behave in certain situations and *Behavioral Modeling* where participants are shown with best and worst approaches to a situation, in order to be able to decide the best approach in case they find themselves in that situation. (London, 2011). The other ways of delivering training are shown in Table 7.

Table 7 - Different types of training delivery

<i>Case Studies</i>	Fiction scenario of events that might occur in the future and have to use their matured skills and knowledge to solve the case
<i>Role-Plays</i>	Immerge in a role and act to show how someone would behave in certain situations
<i>Business Games</i>	Finding way to influence the game's outcome through gathering and analysis of information.
<i>Coordination Training</i>	Testing teamwork through information sharing across the team
<i>Action Learning</i>	Tackle a work problem in teams
<i>Behavioral Modeling</i>	Defining best approaches by showing best and worst behaviors in specific situations
<i>Interactive Video Training (IVT)</i>	Training involving the use of a keyboards, a screen and a microphone (Kleiman, 2009)
<i>Performance/Visual Aids</i>	Training involving visual and performance tools to facilitate participants in performing specific tasks

2.3.4 The 70/20/10 Model

During the career of a professional, continuous development is essential to improve his results, therefore the transfer of learning in organizations should start to overcome the boundaries of traditional methods. Traditional learning involves the (10) and can take place through formal learning solutions such as training, e-learning or coaching, but it is not enough anymore. The moment in which individuals learn is mostly when they work together, the social dimension of learning represented by the (20) and the (70). There are also cases in which the (10) and the (20) are offered together, when formal learning is paired with social learning, nevertheless this can be defined as (10+) approach and does not have to be confused with the *70/20/10 model*.

When applying the 70/20/10 model, it is important to have clear goals and desired organizational results, furthermore, these goals must be aligned with core business objectives of the company. In this way the L&D function is supported, through helping L&D moving from learning value to business value. In conclusion, for most professionals, working and learning are interconnected, by

working with peers, indeed, individuals realize how to reach solutions, collaborate and innovate (Jos Arets, 702010 Institute, 2017).

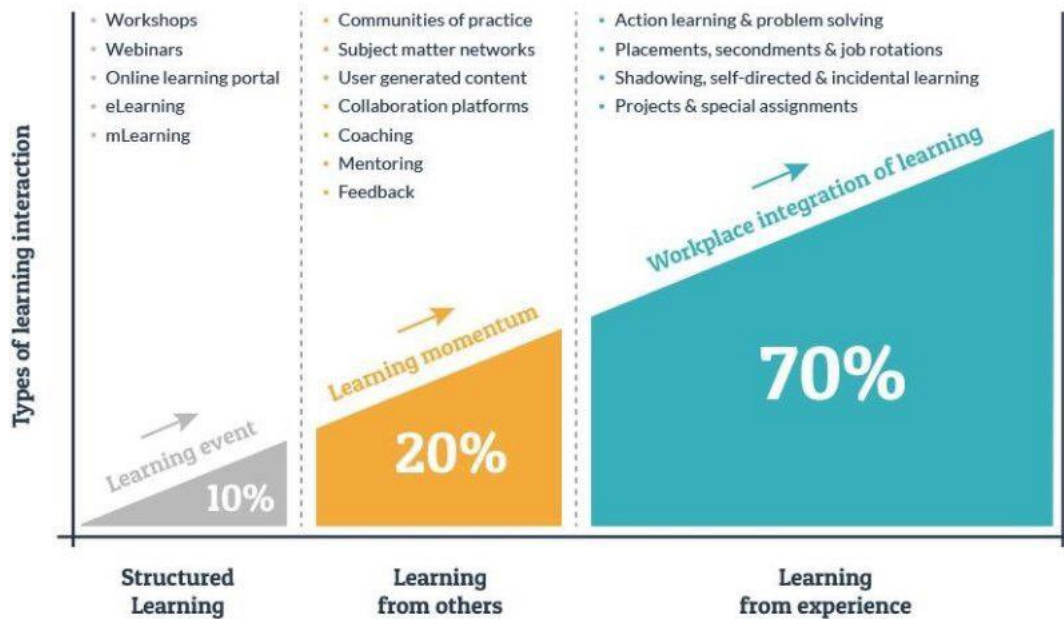


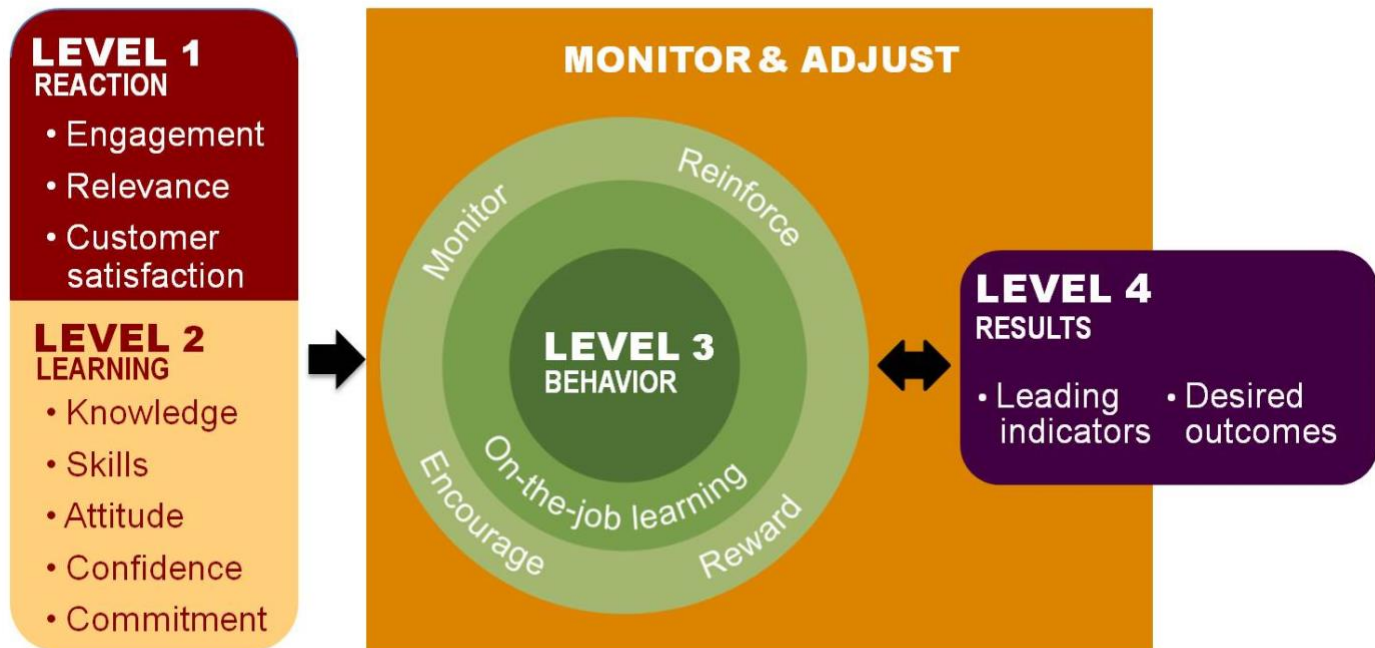
Figure 1 - 70/20/10 Model, Image Source: Paul Kaerger, 27/06/2017)

2.3.5 Kirkpatrick's 4 Level of Evaluation

When it comes to L&D, Kirkpatrick's work on the 4 levels of Evaluation can be considered as one of the most important when it comes to testing the effectiveness of training. The four levels, to which his work refers to, represent a succession of ways to evaluate training programs. Each level is crucial and connected directly to the next one and the more you go forward through them the more difficult it gets. Each level has to be given the same importance, indeed no level should be prioritized according to trainers' perspectives. (Kirkpatrick, 2006).

The four levels are: *Reaction* that is to which extent trainees consider the training engaging, beneficial and relevant to their current occupations; *Learning* that is to which extent participants absorbed the desired skills, knowledge, attitude, confidence and commitment through the participation to the training initiatives; *Behavior* that is to which extent trainees put in practice what they have learnt during the training programs in real job-related situations; *Results* that is to which extent the predetermined business goals take place after the training takes place.

THE NEW WORLD KIRKPATRICK MODEL



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Figure 2 - The Kirkpatrick Model (Image Source: kirkpatrickpartners.com)

2.3.6 Future of Training

Looking at the current trends, we can easily predict what is the direction and new frontiers of training. There are four scenarios describing what was previously mentioned. First, training and technological development will become even closer since most training will take place in a digital environment through technology-enabled interactions. Second, individual learning will become more important given that attention will focus on the trainee's competences and not the trainers' (Rothwell, 2002). Third, the figure of the trainer will be more professional, given that several states are introducing specific criteria in order for trainers to be authorized in delivering their activities. Lastly, trends suggest that training is going to be increasingly outsourced, since organizational leaders are afraid that they might not be able to get greater outcomes through external individuals providing for training (Rothwell & Gerity, 2008). Outsourcing is a way for organizations to cut costs while exploiting effectiveness in their training processes.

Table 8 - Future Trends for Training

Technology-Enabled Training	Training and technological development will become even closer since most training will take place in digital environment through technology-enabled interactions
Individual learning	Attention will focus on the trainee’s competences and not the trainers’ (Rothwell, 2002)
Professional Trainers	The figure of the trainer will be more professional, given that several states are introducing specific criteria in order for trainers to be authorized in delivering their activities
Outsourcing	Training is going to be increasingly outsourced, since organizational leaders are afraid that they might be not able to get greater outcomes through external individuals providing for training (Rothwell & Gerity, 2008)

2.4 Impact of the Pandemic

According to the report by (Training Industry, 2021), 2020 was the year that drastically changed corporate training. This was mainly due to organizations being unable to organize Instructor-led Training (ILT) initiatives because employees did not have the opportunity to gather. This situation brought to light the fact that the current model for corporate training had to be dynamically adapted and updated, starting from making the employee’s learning experience more accessible (Demiraj, 2021). Even though the world has changed drastically in these two years, employees’ need to continue their career journey, upskill and otherwise engage with their employers. Considering the global dispersion of employees at the moment, and also companies that are starting to hire individuals from all over the world remotely, learning became the only glue keeping all pieces together (Demiraj, 2021). The companies coming out victorious from this situation will be the ones able to support their L&D teams.

More than ever employees feel they do not have time for learning at work, but they still comprehend the extreme importance of it for their career. This situation has put companies in a situation of resource scarcity, therefore most of the time employees are finding themselves working more than before, making them less eager to take part in personal development activities outside of the workplace. The solution to overcome this issue that several L&D professionals are adopting are Microlearning and Just-in-Time training strategies.

The accessibility and distribution of content will also become crucial in the upcoming digital learning scenario. Therefore, content should be available at every time, through any device and in every format. The way in which learning is delivered is important to ensure a higher engagement, in fact adult learners generally look for multiple sources for their development, from text to media files. In addition to this, companies should follow up with real-world industry scenarios or concrete examples of what is being learned, to make it more interesting and engaging (Demiraj, 2021).

2.5 Literature Review Structure

Table 9 - Literature Review Structure; elaborated by the author

<p>Learning Organization</p>	<ul style="list-style-type: none"> ▪ Definitions and Concepts; ▪ The effect of learning from Individuals, to Groups, to Organizations; ▪ The New Learning Organization;
<p>Lifelong Learning</p>	<ul style="list-style-type: none"> ▪ Concepts and Definitions of Lifelong Learning; ▪ Participation in Continuing Education Programs; ▪ Role of Organizations in Continuing Education; ▪ Level of Access and Encouragement; ▪ Level of Transfer of Learning;
<p>Training</p>	<ul style="list-style-type: none"> ▪ The Concepts of Training and Development; ▪ Training Categories; ▪ How Training is Delivered; ▪ The 70/20/10 Method; ▪ Kirkpatrick's 4 Levels of Evaluation; ▪ The Future of Training;
<p>Impact of the Pandemic</p>	<ul style="list-style-type: none"> ▪ Impact of the Pandemic

3 Methodology

This chapter aims to illustrate the methodological approach adopted by the researcher to conduct the study. The approach will be presented through the explanation according to which Research Strategy, Research Method and Research Design were chosen for the study. Afterwards, primary Data Collection and Analysis will be illustrated. In conclusion, Research Quality is discussed.

3.1 Research Strategy

The thesis presents a qualitative research strategy due to the absence of analysis of numbers; indeed, words are preferred for answering the research questions (Bell et al., 2019). Furthermore, considering that the research's aim is not limited to test generally accepted theories in the field, but rather to address the research questions from paragraph 1.3 through an explorative process, a mix of inductive and deductive approach is preferred. When we refer to inductive theory, we define a strategy in which assumptions generate from observations while deductive theory assumptions generally originate from existing theory (Bryman & Bell, 2011). While deductive approaches are generally linked to quantitative research, Inductive approaches are associated with qualitative research. However, there is no specific rule saying that one choice might strictly imply the other, therefore there might be qualitative research with a deductive approach (Gabriel D., 2013). Data collected from the interviewed companies, indeed, can provide a more consistent and reliable framework to address the research questions.

Taking also into consideration the exploratory nature of the study, the type of research fitting the most the inductive approach, in this case, is qualitative research. Due to the fact that the purpose of the research is to find out how companies are considering lifelong learning in their training practices and how the current pandemic affected them, Qualitative Research can help to explore the manner and to collect more open and detailed data from the selected companies. By choosing quantitative research, instead, the risk might rely on setting misleading criteria for the study - based mostly on commonsense - that might limit the research's potential. That is why keeping a more open and exploratory approach would allow the researcher to overcome potential limitations in obtaining the desired insights.

Furthermore, the exploration of the themes analyzed in the literature review can be better addressed through a qualitative approach. In fact, qualitative research allows the author, through interviews, to obtain a clearer and perspective from the respondent side with respect to what could be achieved through quantitative research (Denzin & Lincoln, 2011).

Before choosing to adopt a qualitative approach, the researcher kept into consideration all the related criticisms to this choice. A qualitative approach, in fact, can be considered as too subjective, leading to results that might be potentially biased and therefore having a low external validity, that represents how a study can apply to other settings (Bryman & Bell, 2011). Nevertheless, the effort of the author to refer to previous research is aiming to limit potential biases, and the limited replicability is not going to affect the potential of the research in addressing the research questions.

In conclusion, a qualitative study might present lack of transparency due to the fact the process according to which the study is conducted could not be explained in a clearly enough manner (Denzin & Lincoln, 2011). To address this, the author will further clarify the reason for the Research Strategy choice in the following paragraphs.

3.2 Research Design

3.2.1 Multiple Case Study Design

Given that the aim of the research is presenting similarities and differences on how several companies are conducting long term training and what were the changes brought by the pandemic, a comparative design is chosen (Bryman & Bell, 2011). Among the comparative designs, the choice of a multiple case study appears to be the most suitable, given that through the sampled companies, the researcher can draw connections and contrasts among the different cases instead of focusing on the outcomes of one specific scenario.

When it comes to providing insights on a matter, a Multiple Case Study design can be preferable than a Cross-Sectional design, given that the latter provides more generalizability when it comes to the results (Bryman & Bell, 2011). Therefore, the choice of the qualitative approach can furtherly help developing a framework for companies operating in different branches of manufacturing. In fact, the purpose of the research is to comprehend their perspective without being conditioned by the context in which the companies operate.

3.2.2 Selection of companies for the Case Study

The focus is on large enterprises and the contacts are provided both by FTK, due to their large network, and the author's one. The researcher aimed to select companies that are large enterprises in the manufacturing industry due to the author's goal of developing a framework containing companies that are still comparable despite their activities in different categories of

manufacturing. Furthermore the companies were selected due to their declared commitment towards being learning organizations and lifelong learning, that could be found also in their websites.

3.3 Research Method

In order to conduct this study, the author chose to refer to both Primary and Secondary data. Primary data refers to the one obtained directly by the researcher for addressing directly the research questions while secondary data refers to data from external available sources and meant to address different research questions (Joop & Boeije, 2005).

3.3.1 Primary Data

When referring to Primary Data, we refer to all data that is going to be collected by the author in the Data Collection chapter 4. The data will be obtained through semi-structured interviews with experts in the field of adult learning and from members of companies that are currently working with employees long-term development and that experienced changes in their training practices during the Covid-19 pandemics. Their insights could help in providing accurate information to develop a framework for large enterprises adopting the same training practices on entire regions.

3.3.2 Secondary Data

For this work the author reviews previous literature with a systematic approach. This method allows the researcher to have a detailed plan on how to conduct the research avoiding biases through an extensive analysis of previous literature (Bryman and Bell, 2011). The systematic approach seems more useful because it helps to funnel the collected insights into what is required to answer the research questions, therefore focusing on specific matters that are useful to the research.

Keeping this into consideration, a literature review of previous research considered as relevant to the study is conducted. Its aim is to give the reader an extended theoretical background of the research field of the master thesis. Furthermore, relying on previous research involves becoming aware of the current challenges of the research area and keeping into consideration not answered research questions (Bryman & Bell, 2011).

To narrow the scope of the research, the literature was selected considering the following keywords: *Organizational Learning, Learning Organization, Lifelong Learning, Continuous Education, Training.*

A crucial work for the development of the literature review chapter was “The Oxford Handbook of Lifelong Learning” edited by Manuel London (London, 2011). The handbook indeed, gathers works from the most credited researchers in the lifelong learning area that the author considered as a valid basis for the research.

For what concerns the language of the researched existing literature, all the works were written in English.

3.3.3 Sampling and respondent selection

The sample selected for the study is purposive, meaning that the author picked interviewees keeping into consideration their suitability to the study. By suitability theory refers to the ability of the interviewees to provide useful insights for the study in order to address the research questions. Furthermore, purposive sampling is a technique often adopted for qualitative studies. The quality of the data collection samples is ensured by an initial evaluation of their reliability. This study draws upon a purposive sample since the author selected the participants considering their ability of meeting pre established criteria. Meaning that, they should be able to provide insights in order to address the research questions (Samure & Given, 2012). Large enterprises are, according to previous research, associated with a more structured T&D department, making them more likely to present activities related to continuous education and therefore valid targets (Hamburg & Lindecke, 2004).

Regardless of their specific position, respondents have been included as assumed to work practically with the themes of the study. In addition, a purposive sampling seems fitting since this is a technique often used for qualitative research. Further, the reliability of the respondents has been evaluated to ensure quality of the findings. In particular some interviewees have been selected with the dependable support of FTK that as mentioned earlier played a bridge role between the researcher and some companies/experts. When contacted, interviewees are provided with a brief introduction to the topic, followed by a synopsis of the thesis and research area attached.

Given that the author is contacting both interviewees from FTK’s network and from outside, two different messages are prepared, given that in the former case interviewees have been contacted already by FTK. Empirical data is collected by individuals that are considered involved and experts of corporate training programs, as for example Human Resource (HR), Talent Development Managers or Learning Experts.

Most respondents have been chosen by the researcher due to their position within the selected companies. An initial research was made using the keywords “Lifelong Learning” and “Training” within LinkedIn and the author’s network, this to find suitable respondents for the research given that they are at its core. More crucial was their availability in taking part in the interviews and sharing information about their companies and their roles within the organizations. Before interviewing case-study companies, the author interviewed two experts working as training for long-term development consultants for several companies. The idea is to have an initial background of what the situation is in different industries, in order to start having an idea on what to expect. Lastly, a list of case companies’ respondents is provided below in Table 10. The names of the companies are not disclosed due to the request of interviewees to remain anonymous when disclosing sensitive insights.

Table 10 - List of Sampled Companies and Respondents

Respondent	Company	Category	Role in Company
A	/	<i>Expert</i>	Director of Competence Hub
B	/	<i>Expert</i>	CEO of Professional Development Company
C	1	<i>Home Appliances</i>	Manager, Talent & Learning Director
D	2	<i>Components Manufacturing</i>	Learning Expert
E	3	<i>Automotive Manufacturing</i>	Learning Expert
F	4	<i>Telecommunications and Networking Equipment</i>	Line Manager for Learning Service Delivery
G	5	<i>Agricultural Science and Technologies</i>	Talent Development Manager

3.3.4 Interview method and questions

Given the choice of qualitative research, but also the need of obtaining information-rich insights, the choice of interviews for collected data appears to be the best solution for the research. In opposition to questionnaires, which present a close-ended setup for questions, interviews guarantee an open-ended structure allowing the author to collect as much data as possible from each question. Furthermore, in interviews the author has full control on how to vehicle questions in order to address in best way possible the research questions (Flick, 2018)

The relationship between the author and the respondents is not scripted, in fact the author will not provide a detailed questionnaire to the interviewee but he would rather adapt the questions according to the interviewee and to the context. Furthermore, the author is not going to adopt a uniform behavior for all respondents but he will rather follow a conversational mode, having the quality of relationship individualized to every interviewee (Yin, 2011)

The choice for the research is to adopt semi-structured interviews, therefore the author built an interview guide aiming to support him during the data collection process with clear criteria to collect relevant data. The interview guide includes the main topic and questions that the author needs to address in order to correctly answer the research questions (Bryman & Bell, 2011). Semi-structured interviews are considered also a useful tool when it comes to comparing multiple case companies that might have different settings and features. By choosing semi-structured interviews the author leaves room for flexibility that the author can adopt in delivering the questions, in fact he can adapt their order according to the context and the respondent's previous answers. To allow this flexibility, also the interview guide is built up without a strict structure, but rather an open one, easier to adapt to circumstances (Bryman & Bell, 2011).

In conclusion, concepts such as Lifelong Learning sometimes might be perceived as fancy labels to more down-to-earth concepts. For this reason, the author chose to introduce the core focus of the research starting from the long-term development and continuous education concepts. Also, to make the data collection process more efficient and the respondent more aware of what he is going to be asked, they are offered to be sent an email prior to the interview anticipating the macro areas that are going to be covered during the interview. The mentioned macro areas on which the researcher focuses for the study are an initial introduction of the company's commitment towards the long-term development of its employees, moving then to a more detailed investigation on how the company is delivering initiatives for continuous education and how they are assessed. Next to

that, the effect of the pandemic on those practices is questioned followed by the perceptions on what are the ongoing trends for what is going to be the future of training and continuous education.

3.3.5 Conducting the interviews

As previously mentioned, considering the exploratory nature of the study, the author decided to include in the research semi structured interviews from the selected companies. This approach provides structure to the interaction with interviewees while allowing them to elaborate on examples and factors relevant to their situation (Bryman & Bell, 2011). Semi-structured interviews might be the correct approach also because it might open up different scenarios during the interviews; it might also allow the interviewee with more spontaneity with respect to a structured interview. This degree of freedom can help to dig deeper within the topic and to provide additional insights that might help to solve doubts about the manner that otherwise would have been obscure after the research is conducted.

The interviews are conducted via the web. Zoom or Microsoft Teams video-calls are scheduled via email as the interviewees are very geographically dispersed but also due to the current Covid-19 situation. In this way, the interviews can be conducted with the aimed number of individuals and within the limited time available for the study, without being constrained by availability due to time zone differences but also avoiding unnecessary gatherings. Online video-calls are, during these times, the closest means of interviewing to face-to-face ones, in fact, they help taking multiple factors into consideration, such as body language, tone, facial expressions, and so on. Video calls might also help to strengthen the bond between interviewer and interviewee, leading to a higher level of self-disclosure and openness towards the interviewer.

As far as Face-to-Face interviews are concerned, the location was chosen by the respondents to assure his/her comfort and convenience (Bryman and Bell, 2011). Digital interviews have been considered tricky by scholars, since problems might arise due to the unstable internet connection, loss of intimacy of traditional face to face interviews. Nevertheless, the researcher can overcome these issues ensuring a stable internet connection, a quiet room missing any distraction or interferences and also being available to repeat both answers and questions to take track of the facial expressions (Seitz, 2016). After asking the interviewee the consensus, interviews are recorded in order to go through the interview even after it officially takes place. To facilitate the process, the artificial intelligence (AI) powered software *Otter A.I.* is used in order to make a real-time transcription of the interviews to be able to have detailed information before the data analysis.

When the software was not able to transcribe, audio recordings were taken to support the transcription that were conducted manually.

3.3.6 Presentation of the collected data

All the outcomes of the interviews are then presented in the following chapter grouped per experts and case company, so that the reader is able to have a complete understanding of each interviewee's perspective about the addressed matter. The idea is to then subdivide the findings in order to better connect the results to both interview guide and the literature review. Results in each paragraph are divided into 5 categories to facilitate the reading, those are: *Description of Respondent's Role; Delivery Methods; Assessing Training; Impact of the Pandemic; Future Trends.*

Insights not relevant to addressing the research questions are not inserted.

3.3.7 Data analysis

In chapter 5 the findings will be discussed through the analysis of the interviews. Following the same structure adopted in the data collection chapter, a comparison between empirical findings and theory is made. The referral to the previous chapter helps both author and reader to give a key to better read and comprehend the data. Furthermore, the critical approach by the researcher plays also an important role in interpreting the collected data and in coming to valuable answers for the research questions. Before inserting the analysis in the research, interviews are funneled to organize the findings. In particular, to proceed with the analysis, the author starts from previous research in the literature review, analyzing each paragraph to see if any of the data collected matches with what was found in the empirical data. The main focus is to match insights between theory and empirical data and on the new insights that can contribute to previous research. For this reason, aspects mentioned exclusively in the theory are left behind. In conclusion, when the theory is in contrast with what is found in the empirical, it will be covered in the analysis part.

Despite the uncertainty that it might follow, the researcher preferred to disassemble data without a formal coding approach because by leaving full discretion to the author. Indeed, "*creative ideas seem to move faster and better*" (Yin, 2011). Furthermore, to overcome inconsistency and inaccuracy, the author will iteratively return to the collected empirical data multiple times to ensure that their dismantled topics are as faithful to the original data as possible (Yin, 2011).

3.4 Research quality

When it comes to qualitative research, the quality has often been object of discussion among researchers. In particular, the quality of a qualitative study is associated with both validity and reliability (Seale, 1999). Maxwell highlights the issues of validity by referring to “*the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account*” (Maxwell, 1996). In order to ensure the quality of the work, indeed, the author is aiming to adopt two out of the seven points in the checklist from Joseph Maxwell (Maxwell 2009) to combat threats to validity. Those are: *Respondent validation*, that is to obtain feedback and validation from the studied individuals to diminish the interpretation bias caused by their self-reported behaviors and views; *Comparison*, that is to test and compare the outcomes across different settings, groups, or events.

3.4.1 Internal reliability

Internal Reliability refers to the degree to which other researchers could relate the generated data in the same way as the author, in fact the way data are interpreted must be coherent (Bryman & Bell, 2011). For what concerns this study, there is a limited risk to not reach internal reliability, since the research is conducted by a single author which ensured to be systematic in the data collection and analysis processes.

3.4.2 Internal validity

Internal validity concerns the extent to which the research is correctly shaped to address the research questions. The objective to ensure internal validity is to guarantee that there is a clear connection between the collected data, the selection of the samples and the conclusions that are drawn at the end of the research (Bryman & Bell, 2011). To guarantee the overall coherence of the research the author aims to adopt an iterative process in order to construct a solid line among the data collection and the conclusions.

3.4.3 External validity

External validity refers to the extent to which the research can be replicable in other settings and whether its results can be generalized beyond the specific research context (Bryman & Bell, 2011). The choice of a qualitative study might compromise generalization, since it might be difficult to apply the results from one sample to all the population. The lack of generalization can be created also by the choice of a Multiple Case Study approach. Despite connections that might arise among the selected companies, the author’s intention is not to build a generalizable framework. This is

due to the fact that the results might be influenced by the settings in which the different companies operate, therefore the result should not be seen as applicable to all settings, but rather a try to support with additional insights the existing literature on continuous education and long-term development. Furthermore, the main limitations for the research, connected mainly to the scarcity of time and resources available for the research can also play a role in affecting the research generalizability. Nevertheless, the author tries to guarantee a better robustness for the work by using triangulated sources to collect insights, including experts and the sampled companies.

4 Empirical Findings

In this chapter the author is going to present the empirical data obtained and reorganized in order for the reader to follow a clear line of discussion. Going into detail, data is presented per case companies in order to provide a clear framework of what were the outcomes of each interview. Interview outcomes are furtherly organized by discussed topics to highlight the crucial data to answer the research questions. To have a clear view on the discussed topics, the subchapters are connected to the Literature Review chapter, in order to support empirical data with theoretical frameworks. For the purpose of clarity, the author considered, after describing respondents' role, to divide the empirical outcomes in four main categories that correspond to the main points constituting the interview guide and stressed during interviews. These are: the delivery methods companies are adopting to provide continuous learning; the way they are assessed; the impact of the pandemic; future trends. Lastly, a summary table is provided to summarize the chapter.

Data collection from experts

4.1 Expert 1- Director of Competence Hub (Respondent A)

Respondent A is the director of a competence hub operating on a regional level the purpose of which is to determine, organize, develop and match practical initiatives for the business communities' and individuals' adjustment needs in the long term (The Organization's website). The organization operates across 5 business areas: *Vehicle, Transport, Technology/Industry, Retail and Tourism*. Each business area is characterized by different features, people and challenges which are discussed by the organization together with stakeholders of each business in order to identify and meet their needs. The EU directly sponsors the organizations' initiatives to deliver long term development for individuals in organizations. While the European funding looks into the individual perspective, they focus so much into the company perspective. Therefore the competence hub is trying to leverage the two perspectives, individuals and companies. The organization's activity in support of the companies starts by evaluating the required training and then procuring it from service providers for finally organizing it.

4.1.1 Delivery Methods

When asked which training delivery is better suitable for delivering long term development, and to which industry, *Respondent A* pointed out that moreover all industries nowadays are providing employees with e-learning or with blended opportunities, but also that the focus should be on another issue.

“...the first problem is that most employers are not aware of the skills that staff members have, which is one problem. On the other hand, employees would not know what skills they need in order to adapt to change, so they don't have an understanding of what they actually need in terms of skills.” (Respondent A)

He stated also that this is one of the major challenges they are facing as a training supporter organization, given that the businesses are not mature enough to work strategically with upskilling and rescaling their staff.

4.1.2 Assessing Training

When *Respondent A* was asked how the effectiveness of training was assessed, he stated that the key indicator in assessing it is the participation to the training and subsequently what are the features of the participants. The second way of assessing it would be the use of questionnaires, still the organization has not performed many given that it was founded recently. The goal of the questionnaires is to do a follow up and investigate whether the individual feels that the training actually helped him to fill the gaps he thought that might have limited his career expectations, and whether those expectations have now made him more confident as a professional and to solve the required needs and better adapt to change.

4.1.3 Impact of the Pandemic

“...I think the pandemic has accelerated trends that we have already seen before. So it's been like putting petrol on fire.” (Respondent A)

He states that the retail business is probably the best example of that, because a trend to moving towards more e-commerce solutions such as shopping online was already ongoing, but with everything closing down the switch was made faster. Anyway, a very worrying trend is pointed out by the interviewee, the amount of competence development initiatives and time spent by employees. The temporary layoff system in Sweden evidenced, according to him, that in a moment in which not having to work could have been used as an occasion to work on training, around 600.000 people decided to spend time doing something else. In this way despite time available and opportunity to train increased, the actual training decreased.

4.1.4 Future Trends

When it comes to the future of learning and training, *Respondent A* believes that a new ecosystem is emerging. For example, some countries are starting to modify their labor laws to make it easier

to put people on layoff because they think that it might benefit the business environment. As a compensation for that, they have added extra opportunities for employees' skills development. The new ecosystem allows employees to temporarily leave jobs, still keeping their employment, while participating in learning programs and still getting up to 80% of their initial salary, which is paid entirely or partially by the government. Then, added Respondent A, trade unions and companies should work together to identify the needed skills, how to acquire them and so on. Furthermore, training should be more synchronous and much more flexible.

"... while back in the days you took a year off to pursue a MBA, now things have changed and people are needed in the company while pursuing the acquisition of new skills and knowledge."
(Respondent A)

Individuals' role in participating in these programs is going to become central too, and lead to better results since it would be self-driven personal development.

Key Findings:

- *Employers do not have in mind which skills they need from employees and viceversa;*
- *Participation and questionnaires as main way of assessing training;*
- *The pandemic accelerated many ongoing trends;*
- *Need for continuous acquisition of new skills since they outdate easily;*

4.2 Expert 2 - CEO of Professional Development Company (Respondent B)

Respondent B is the CEO of a company involved in helping organizations and its members with professional development. The purpose for this company is to provide a service for lifelong learning for departments through a subscription service where they offer different tracks where organization members can meet some of the world's best designers in different aspects and have them as tutors. The offer goes on for however long and individuals want to stay in the program. For this reason the company's activity doesn't take place for just a couple of days and it is not like a conference, that is one day. The company keeps into consideration whatever represents an ongoing, lifelong program, given that they consider the current system to be broken in the way companies try to educate employees by just sending them to two or three day courses once a year or once every second year.

4.2.1 Delivery Methods

According to Respondent B there is a new trend of people away from in person training sessions where you either gather a lot of people like 10 or 20 people in a room together and try to learn something over three, three days or so. Other options are also being offered such as LinkedIn Learning and Coursera and everybody else is fine with learning through media materials and online questionnaires, especially, since you can do this training at your own convenience, and in any place with just an internet connection. But despite that, the respondent thinks that this asynchrony can be considered more of a bug than a feature. The reason for that is that most of the time this ends up not happening.

"...people sign up for these things but they don't take any courses or they start something, but they never finish it." (Respondent B)

For example, the respondent continued, some companies signed up for LinkedIn learning for all their employees, and then when they sort of make a review, but after a year, they can see that no one has logged in. In this way it actually doesn't help them, it's just a way to cheer up employees offering those many possibilities, but without a specific purpose. This, according to the respondent, doesn't really help the employees, and it doesn't really help the company either, because it won't help employees to develop, but it is still preferable for companies to offer it since it does not really cost much per individual.

When judging this practice, the interviewee defined it as: *"a cheap way to get rid of a bad conscience."* (Respondent B)

Jumping to the program they are setting, it presents materials that can be read in between sessions, but then sessions are live, together with industry experts and individuals having the same roles in other organizations, in order to discuss challenges together. The idea is delivering a blended forum with materials provided in advance and then having interactive meetings every two weeks or every three weeks or so.

4.2.2 Assessing Training

As stated by the respondent, assessing whether a training initiative was effective or not it is a difficult task. In opposition to courses releasing diplomas, licenses or validations, assessing courses meant for strengthening soft skills such as leadership, is really difficult. When it comes to them, the respondent continued, the choice of a questionnaire might not be effective when it comes to assessing training, since those skills cannot be quantified in numbers for example.

4.2.3 Impact of the Pandemic

According to Respondent B, during the lockdown many companies froze their educational budgets focusing on a grey short term perspective. This of course impacted the possibility for employees to attend any course or class in many companies. Nevertheless, continued Respondent B, in a long term perspective, people are getting used to online learning platforms and to learning by interacting through a screen.

“...when it comes to face-to-face training, the attractive part for employees is not only about the training itself, but also the motivation linked to the experience around it, like for example attending a conference in another country, going for dinner with colleagues and so on.” (Respondent B)

Of course, concluded the interviewee, given that at the moment it is not possible to travel like we used to, these online tools such as Zoom, Hangouts and so on helped to limit these issues.

4.2.4 Future Trends

“...there will be hunger for meetings in physical settings, therefore having a pendulum swinging back and forth towards meeting spaces and conferences or classes” (Respondent B)

After the pandemic there will be, according to Respondent B, hunger for physical meeting in physical settings, therefore having a pendulum swinging back and forth towards meeting spaces

and conferences or classes. However, even when everything will go back to normal, there will be a more blended environment, with a mix of online learning and physical meetups.

“...many companies are currently seeing training as just a way to make a nice impression on employees and stakeholders, such as with sustainability courses where they care only about ticking a box saying “done”. What they should focus more on is indeed providing the right training for the skills that can help employees become better professionals and to perform better in their position.” (Respondent B)

Key Findings:

- Most employees are not fully exploiting learning opportunities;
- *Challenging to assess Soft-Skills acquisition;*
- *Pandemic impacted negatively the learning overall experience;*
- *Training should be suited for the right needs;*

Data collection from Sampled Companies

4.3 Company 1 – Home Appliances

4.3.1 Manager, Talent & Learning Director (Respondent C)

Respondent C is working in the talent management and development space of her company. In particular, her duty is not only to work with training but it is overall holistic talent development that represents the main goal when it comes to development. The talent management and development team operates always in the long-term and her duty is to assess the inter-relationships between talent assessment, talent management and talent development. Talent management evolves around first the assessment of the most critical talents in every organization and business function, then moving to the process of putting them through developmental opportunities so that they can grow and become leaders of the organization. For this reason talent management is strictly linked to talent development.

4.3.2 Delivery Methods

Respondent C evidenced how programs are mainly in talent development since talent management is more about assessment of employee performance, employee talent, succession planning for the most critical roles in the company and then how that translates into developmental opportunities for those successes.

“...the main goal of the programs is to grow employees in a long-term direction, in order to ensure them a longer and rich of opportunities career in the company and outside of it.” (Respondent C)

When going into detail, respondent C said that the programs are very blended due to the wide span of development opportunities that her company offers to its members. The main method used is the so-called “70-20-10” approach. In particular, 70% of development comes from the job itself (*on-the-job training*), where individuals are gradually asked to expand assignments, lead a team and so on, in order to do succession planning and make people ready to get promoted to leadership roles. The second part, the 20%, is divided in two. The first half comes mainly from networking opportunities, in detail, what are the mentoring or coaching opportunities that the company can offer to its employees or also how the company can encourage employees to get an external Master in Business Administration (MBA). The second half of the 20% is connected to exposure, so how they can be exposed to their higher supervisors in the senior leadership team or for example experts from other organizations. The remaining 10% is represented by the training itself, referring to the kind of learning the company is offering.

The interviewee claims that in the past the company used to offer training in terms of classrooms, but now it has an online dimension, including certification courses, MBAs or any other form of deep and transformative learning, following the holistic model of learning and development that the company is currently adopting. In particular, the chosen platforms are We Learn/Degreed. One example of a program for development are Graduate Programs, that are meant for young talents in the company.

“...the graduate program allows them to go through the insertion of these young talents in multiple and bigger roles in order for them to grow as professionals and get an enterprise or “helicopter” view.” (Respondent C)

Another example are programs meant for female talents, having the main aim to increase female representation in the organization and to insert high potential female talents into development programs in order to accelerate their growth in the future. Last, the respondent adds, the company offers another program that is meant as an accelerated growth for senior managers level people, in order to turn them into directors. The program mainly focuses on converting them into leaders, getting them a MBA, and how to give them an inter-functional or inter/cross-regional assignment, so that they can step up to a director level.

4.3.3 Assessing Training

In order to assess the effectiveness of these initiatives, adds respondent C, participation plays an important role. In fact, checking how many employees are registering and coming into the platform the company offers for those initiatives is a good indicator. Nevertheless, what is more important to the interviewee are returning users. For returning users she means employees exploiting the training platform at the best, coming back on a monthly basis to learn. Another indicator for assessing the effectiveness of these initiatives are skill gaps. Skill gaps are initially measured and inserted in the system all together. Therefore, the programs are then suited accordingly to the skill gaps that each individual has in order to fill them. Overcoming these skill gaps, concludes respondent C, is another clear sign that the designed programs were effective.

4.3.4 Impact of the Pandemic

When talking about the pandemic, respondent C evidenced how it did not have excessive effects on what were the initial development initiatives the company was carrying. The company indeed was already moving towards a more digital environment for learning.

“...despite this transition was already planned, it was not meant to be for 2021, she adds. The pandemic in fact, accelerated it to 2020 and the digital transition became a necessity besides ambition.” (Respondent C)

Furthermore, all the previously mentioned programs such as the female development one were moved to a digital environment. Even if this transition might look difficult to implement, having an initial plan to do it helped the company to take the step easier, the pandemic simply accelerated the process.

4.3.5 Future Trends

According to respondent C, the world is headed towards the so-called customized learning or personalized learning.

“...having a catalog of choices trying to satisfy everyone’s needs is not sufficient anymore, since the same skills might not be required by everyone in the company. For this reason, to fit each employee’s learning needs, the training companies are starting to offer are really customized.” (Respondent C)

Furthermore, concluded the respondent, there is a higher demand for leadership competencies, emotional intelligence, human skills and the ability to manage teams in a virtual environment.

Key Findings:

- *Blended Approach, either face-to-face or through digital learning platform;*
- *Skill Gaps monitoring to assess training;*
- *Pandemic anticipated change, digital transition became necessary;*
- *Movement towards more customized and personalized learning;*

4.4 Company 2 – Components Manufacturing

4.4.1 Learning Expert (Respondent D)

Respondent D works as a learning expert in the group HR of his company. Despite sitting quite centrally in the company, learning experts in Company 2 are decentralized, i.e. they don't go into details when coming to the whole training and what people should learn close to the business. In particular, Respondent D role is to support the different academies delivering the training and helping them in their decisions. The support comes mainly with new ways of learning and methodologies to new ways of thinking. The interviewee is also involved in the development of a new IT structure to build a learning ecosystem and also helping the spread of the learning culture across all the company.

4.4.2 Delivery Methods

As Respondent D explained, the way Company 2 is delivering training is scattered. Mainly, the company is organized in internal academies, 18 to be precise, each for any function, from sales to finance and manufacturing. In the academies few of the trainers are full time ones, in fact, many of the tutors are not professionals but employees sharing their knowledge and skills with other members of the organization for the 10-15% of their work time. This means that training and development is scattered not only in the delivery methods but also in the individuals involved in the process. Taking into consideration the 70-20-10 framework, what the company is trying to do, adds the respondent, is to concentrate more on the formal training for individuals themselves, the social collaboration and learning in the workflow. The social dimension is in fact important to Company 2, for example, what they do in many cases is provide employees with some case studies with real life problems asking them to reflect on a solution. In a digital environment such as Microsoft Teams they are then sent to breakout rooms and asked to share their thoughts with their peers.

“ ...training should always involve discussion leading to involvement. Sometimes learning should also be questioning yourself why you are doing it and not just sticking to some course in a limited time framework.” (Respondent D)

For what it concerns the place where training happens, even if not considered as a training platform, continues Respondent D, training and development takes place also on tools such as Microsoft Teams since the company is willing to take a step forward with respect to traditional learning. In traditional learning companies have the belief that the Learning Management System

(LMS) has to be considered the only training platform. What company 2 is doing is trying to transform training into a daily activity that can take place in different environments and with different methodologies and tools.

“...the main goal is to build a learning ecosystem instead of just having a LMS which is the actual situation. Furthermore the idea is to transform training into smaller bits of content that each person can choose from, moving in the direction of customized learning in order to make the employee more eager and adaptive to the dynamic requirements linked to the fast-changing business environment.” (Respondent D)

4.4.3 Assessing Training

For what concerns the assessment of the training initiatives, Respondent D thinks that the introduction of new technologies will help drastically the assessment processes.

“...the idea is to create profiles for each employee to then track their progress while developing new skills.” (Respondent D)

At the moment many companies, including Company 2 are using LMS for tracking the completion of training programs. Still, the interviewee added, completion might not be a correct indicator, since it does not ensure that the learner actually absorbed the learning. For this reason Company 2 is looking mainly to concrete indicators on a macroscopic perspective, such as business impact. Furthermore, the core of the company’s interest, when it comes to assessing the quality of training, is on the individual perspective, not the trainer’s , the environment or the classrooms. It is so because at the end of the day, concludes respondent D, the most important thing for the employee is having absorbed what he learnt in order to put it into practice.

4.4.4 Impact of the Pandemic

For sure, said Respondent D, the current pandemic led Company 2 to the adoption of a hybrid style of learning. This style involves face to face classes, virtual learning and forum facilitators due to the many fields that the academies have to cover. The academy that faced more difficulties in this period was the manufacturing one since it is difficult to train employees virtually on matters of crafting. For this reason, they had no choice but to go back to face to face training to avoid standing still for too long.

Finally, for what concerns the digital transition, the respondent admitted:

“...it was not a priority for the company, in fact, if it was not for the pandemic, the process would have taken up to 5-6 years to take place.” (Respondent D)

Therefore, the pandemic dramatically accelerated this transition because of the desperate need to find solutions to the current situation. Mainly, the current situation contributed to boost the change.

4.4.5 Future Trends

According to Respondent D, there are many ongoing trends. The first one is that training departments will not be in charge anymore of just doing courses, contents and materials but also supporting the organization with coaching and mentoring. From a technical point of view, new frontiers of delivering training such as Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) are being adopted. Furthermore, new Learning Experience Platforms (LEP) are becoming popular, having all the knowledge in one place and also being set to offer adaptive and customized learning to employees. The most important trend to mention according to the interviewee is that continuous learning is going to become crucial.

“... while in the past an employee could work his whole career with the same set of skills, the new challenging business environment makes it difficult to keep up with the same knowledge forever. Therefore employees should become keen on keep adapting their skills to what the market needs, in order to preserve the organization’s competitiveness, but also to ensure them lifelong employability.”(Respondent D)

Key Findings:

- *Internal academies with network features to deliver learning;*
- *Training assessed through individuals analytics and business impact;*
- *The pandemic forced change that would have taken place in 5-6 years;*
- *New VR, AI, AR solutions to support training;*

4.5 Company 3 – Automotive Manufacturing

4.5.1 Learning Expert (Respondent E)

Respondent E works as a learning expert in the Learning Expertise and Development department of her company. Going into detail, Company 3 has an internal corporate university and her role within it is to secure the quality of the training the company offers. Furthermore, she has been working for many years with adult learning, for this reason she is currently supporting

management teams in the organization with the development and choice of methodologies of training.

4.5.2 Delivery Methods

Company 3 has an internal corporate university divided in six academies, each of them covering different subjects. Among the subjects covered, the portfolio of training includes Business Administration, taking care of common themes such as culture and change, Sales and Marketing, Purchasing, IT and Technology Operations. Training offerings are provided through both internal organization's members and external providers.

"...when it comes to internal members, the company ensures they have all the necessary skills to deliver learning through extra courses, so that they can become tutors for their peers. Among the tutors there are instructor designers which develop training offerings, that in many cases are both virtual and face-to-face." (Respondent E)

The corporate university offerings are meant to be exploited during working hours, nevertheless the presence of multiple digital solutions for learning make it possible for employees to take part in the programs whenever they want, even outside of the working hours' time frame. When the courses do not imply daily situations and company related matters, Company 3 prefers to buy the courses from external providers instead of providing it itself (e.g. Excel courses or Language Courses). From a macro perspective the company is currently dealing with a self-directed way of learning through multiple ways, such as On-the-Job training, Network training, Case Studies and Mentoring Programs. Despite that, the objective of the company is to reach by 2030 a purpose driven way of learning. To keep track of the LMS, Learning Channels and Learning Methods to focus the most on, adds Respondent E, the company is adopting the L&D Innovation Bulls Eye Model by CEB (Gartner) model, which reflects the company's direction for training. Another adopted model is the 70/20/10 Model, focusing on the learner path from the introduction to training until the desired outcome for the company.

4.5.3 Assessing Training

Respondent E sustains that whenever they secure learning, they have clear learning objectives in their trainees. During the training the tutors can ensure that they are delivering the right kind of training and check if participants are learning on the way. Besides that they can do knowledge tests and different kinds of evaluations to ensure that the company can take the next step in changing employees' behavior, in some cases in fact they follow up to check if the behavior is in

place. The type of assessment depends also on the strategic importance of the different kinds of training programs the company delivers.

“... one model the company is using is the Kirkpatrick’s four levels of evaluation and going into detail, the trainers look at the outcome the company is expecting to reach through the program in the development phase, and therefore identify Key Performance Indexes (KPI) that if in place can benefit the whole organization.” (Respondent E)

According to the interviewee, assessing the acquisition of soft skills is not so difficult, since being on a long term scale, a supervisor can easily perceive if the trainee changed his mind set and attitude. For this kind of evaluations, also interviews are used, where individuals’ new skills are assessed through multiple perspectives such as his own view, his peers and subordinates. Another considered KPI, adds the respondent, can be the trainee’s career progress. For this reason, when they see these indicators taking place, then the company can feel relieved that the investment they have done in these programs was a success.

4.5.4 Impact of the Pandemic

According to Respondent E, the pandemic affected the company in different aspects. While companies were shut during the beginning of the pandemic governments offered them to do competence development, to do so a program called competence boost was launched within the corporate university. The company also had some difficulties in the beginning to turn tutors into virtual instructors, since they suddenly had to operate in a different environment, this in order to ensure that quality will be maintained anyway.

However, continued the respondent:

“...switching to a virtual learning environment also brought benefits, such as the possibility of connecting people and tutors from the many countries the company is operating into. Nevertheless, this transition was supposed to take place in a couple years and not a couple months, therefore the pandemic accelerated the transition.” (Respondent E)

Despite it being scary for the company in the first place, said the interviewee, the company responded well to the necessity thanks to its skilled IT team that managed to develop a well working infrastructure in a limited amount of time.

4.5.5 Future Trends

“... different trends are taking, among these, more importance should be given to the transition to modern learning.” (Respondent E)

Modern learning does not see people as sponges for knowledge and the tutors as the only active parts, it is basically the opposite. In modern learning in fact the learner is the active part constantly chasing new knowledge in order to construct their experiences instead of being recipients of already made solutions. Another trend is that online training will continue with new delivery methods, such as podcasts for example, but the face-to-face dimension will not be forgotten since for some types of knowledge active interaction is crucial to the success of the programs. Therefore a mix of delivery methods will take place in the future and also training is going to become more adaptive and flexible while individuals will need to become more curious and more proactive towards learning.

Key Findings:

- *Corporate university towards purpose driven learning;*
- *Training is assessed through the Kirkpatrick 4 Levels and behavioral monitoring;*
- *Anticipated change that was not supposed to take place so early;*
- *Transition to Modern Learning;*

4.6 Company 4 – Telecommunications and Networking Equipment

4.6.1 Line Manager for Learning Service Delivery (Respondent F)

Respondent F works as a Line Manager for an organization within his company called learning service delivery. Learning Service is the mother organization which caters for all training aimed for customers. These trainings are meant to take place in case of the purchase of either a product or a service or a network and delivered by the respondent's organization. The niche of his team is within interactive learning, therefore they do not do instructor-led training but rather eLearning, videos, webcasts, blended training flows and such.

4.6.2 Delivery Methods

When It comes to employees' training, company 4 started with a LMS where it stores all the courses and has a handle on class registrations and so on, even for instructor-led training. Within the system every product area has its own share-point site, which is an internal page in which every product has different associated training. Nevertheless in the last year the company adopted a platform called Degreed, an upscaling and learning experience digital platform. The platform

consists of a webpage that makes all the training within the company available to everybody in the organization. Each member in the organization has a personal page where you can follow other people, just like in social media, subscribe to trainings sessions and get suggestions on the next steps of his career.

“...for example, if you are a Project Manager, the platform will suggest which courses your peers in the same position are taking. At the moment the platform is doing well, given that in terms of numbers almost 90% of the company is using it.” (Respondent F)

Even Talent Management is connected to the platform, in fact, based on your profile and the courses that you have taken, through the platform the company signals and offers to employees new career opportunities. In other cases they can be searching for somebody in the organization with specific qualifications and get back to employees when matching the criteria. The company is currently encouraging employees to take charge of their own competence development. This connects to another feature of Degreed, its score system. Degreed indeed has this mechanism giving employees points whenever they complete a course, they share their outcomes, share articles and so on. In doing this the platform relies also on external platforms, so that the system will also register activities on other websites. The objective for the platform is to follow the employee through his entire career, since you can transfer your profile also to another employer. However, not all the L&D activities are left to employees, in fact when it comes to compliance learning, the company is somehow forced to push individuals, given that it needs to meet regulatory objectives. Respondent F is also convinced that a lot of pressure is coming from governments and the European Union, since in the fight against unemployment they are pushing a lot on continuous education initiatives.

4.6.3 Assessing Training

As stated by Respondent F, when it comes to assessing through the learning experience platform, in the presence of specific courses or programs, participation and completion are the main criteria to keep into consideration. When evaluating, Kirkpatrick level one and two are used, furthermore, course usage can be valuable also to indicate which skills are more requested and pursued, but also which can be the ones that the company might require in the future. Furthermore, to measure learning, participation and completion are not enough to establish if the learner actually acquired the knowledge or just went through the course with no outcomes or interest. Therefore, besides the previously mentioned indicators, follow-up structured interviews are conducted with people that completed the training to see if they really possess the comprehensive knowledge. They assess

this through quizzes after the course takes place, sometimes it is embedded in the course, and it's not a positive approach according to the respondent.

"... for what it concerns soft skills, of course it is not to assess the effectiveness of the programs, but given that the program is for approximately 7400 managers a week, it is possible to assess it by comparing them." (Respondent F)

One way the company uses is a survey called "the voice", that is conducted each quarter. During the survey employees are asked different topics such as how good they perform in their team when it comes to innovation, team spirit and so on. In case the company spots a low number in one of those areas and they launched a related training intervention, then it will force all managers to take it and check then in the next survey if the gap has been filled.

4.6.4 Impact of the Pandemic

Direct examples of the impact of the pandemic can be identified in many fields.

"...I was attending a course that formerly was supposed to be three hours per day for five days, instead the company had to shorten it because of the impossibility to meet face to face." (Respondent F)

Furthermore, the learning uptake was negatively affected since they were not able to meet face-to-face. Furthermore, the respondent is convinced that the pandemic accelerated trends and therefore the transition towards a digital learning environment. Even though this transition was planned already, the pandemic forced the change, furthermore, some former managers were already warning the company around a decade ago that change towards digitalization would have become inevitable, but they were not listened to until today. Back to the learning outcomes, the respondent is really critical, since he defined it as not efficient spending several hours in front of a screen, this results in being not stimulating and thus engaging. Nevertheless, the pandemic also had positive impacts. Through digital learning, cost barriers are overcome, since there is no need to travel anymore, keeping in consideration all the expenses of the case. Furthermore, trainers of a certain age might find it difficult to travel around and spend several days or weeks far from home and their families, therefore digital learning represents an effective solution for them.

"...not to underestimate, also the environmental impact caused by travelling is reduced or eventually eliminated thanks to online learning." (Respondent F)

4.6.5 Future Trends

When asked what are the future trends for L&D, Respondent F expressed that we might move into a direction where learning is available when it is needed, therefore not relying too much on people's memory.

"...in a traditional scenario the knowledge would be acquired at a space in time where it might not be needed, or in some cases way before the actual exploitation of the knowledge. In the future instead, knowledge is going to be "just-in-time", when needed." (Respondent F)

In the future Performance Support tools, which are meant to help employees with on-the-job support at the moment of need, are going to be widely adopted by companies and introduced in the application itself.

"...one example can be, after the download of a new app, the series of tutorials that appear at the first usage, helping the user to become familiar with the software as soon as he utilizes it." (Respondent F)

Furthermore, the knowledge will be limited only to the requirements, therefore not starting from the very basic theory. Another trend is connected to the introduction of new technologies in the learning processes, for example AI. The idea is to have either a personal assistant that, as mentioned before, can provide you with knowledge just-in-time just like Google when searching for information, or in terms of advising which courses to take based on the previously attended ones or the learner's interests. In conclusion also the format of knowledge acquisition will be moving towards a more bite-sized learning approach.

Key Findings:

- *Score system based on learning activity;*
- *Large-scale monitoring to assess learning;*
- *Positive impact on costs and environment, negative on learning outcomes;*
- *AI enhanced just-in-time-learning;*

4.7 Company 5 – Agricultural Science and Technologies

4.7.1 Talent and Organizational Development Manager (Respondent G)

Respondent G works in Talent Management and Organizational Development Management. Going into detail, she is supervising a team focused on both of the previously mentioned aspects. The goal of the team is to deliver the best learning experience possible to the employee. Furthermore, the team is in charge of all the cycles of talent development, from talent acquisition to dismissal. For what it concerns the company development, it works in partnership with the management to facilitate the evolution of many aspects, among which the cultural dimension of the company.

4.7.2 Delivery Methods

When asked which were the methods through which Company 5 is delivering training and long-term development, Respondent G said:

“...in 2018 there was a huge turning point for the company: the launch of the corporate university. Through the corporate university the company wanted to make clear its vision as a Learning Organization, by working on employees’ distinctive capabilities to maintain a competitive position in the market.” (Respondent G)

To deliver this, the company is focusing a lot on digitalization that has not to be seen as a fancy solution but rather as a flexible way to work on internal skills and to be attractive to new candidates and current employees. The corporate university works on its group identity through customized digital learning, in particular semi-interactive digital courses are offered linked to the technical professional development to soft skills. For example, a researcher should be always updated on how to use machines, lab instruments and innovation processes, but everyone should take part to courses such as the “managing your time” program, in which employees are tutored on how to deal with time management efficiently. Most digital courses are developed internally and customized but the corporate university uses also “on-the-shelf” ones, in particular buying them from external providers, first evaluating the fit with the company’s culture. To empower organizational efficiency, the company wants to align all teams, that are now preferred to the “top-players”. The company, added respondent G, is trying to digitize also onboarding through a coaching for the hiring team, having in mind that their decision in introducing a new resource are going to impact also the top-management. Another feature of the corporate university is an open license for LinkedIn Learning, in this way employees are offered with a wide range of learning

opportunities outside of the standard offerings the company has. Another used platform is Franklin Covey, less formal in terms of learning procedures, but with high quality contents.

“... the company is focusing on motivating employees to have discipline in the research for self-learning since, as a declared Learning organization, we are aiming to provide lifelong learning opportunities to program participants. For this reason the company is expecting employees to be eager to exploit these offerings.” (Respondent G)

4.7.3 Assessing Training

The first thing assessed from company 5, said Respondent G, are the utilized learning platforms before their launch. What they want to be sure of is that they are providing high quality content, they are fully accessible and user-friendly. When it comes to the trainees side, having a digital learning environment allows the company to track the progress of each individual through analytics made of data collected from the users' participation in the programs.

“... completion of programs represents an important index but it is not the only one, in fact, competencies are also assessed to the team contribution the trainee gives. If the business units suddenly start to perform better, then it might be that the program was successful.” (Respondent G)

The company also wants to get individual feedback, therefore asking individuals which are their impressions on the attended program but also if they felt any improvement with respect to their skills.

4.7.4 Impact of the Pandemic

The pandemic did not dramatically affect the company's offering for training and development. The reason behind that is that the company has been working since the day of the launch of the corporate university in a fully digitized learning environment. Having the possibility to take part in programs anywhere at any time is a great step towards continuous education and self-professional development.

“... having a fully digital environment has also a considerable positive impact on use of resources, in fact there would be no need for classrooms devoted only to training, there would not be the need to pay for external tutors travel expenses and furthermore participants from different countries and locations can take part to the trainings they think might be useful the most for them with no geographical boundaries.” (Respondent G)

4.7.5 Future Trends

“... digitalization will become the core of future learning and companies should invest in it due to the many advantages it brings, in terms of costs and accessibility.” (Respondent G)

Furthermore, the type of training will differ from the traditional way of learning, meaning that we are moving to more Bite-Sized learning solutions, transmitted from companies on a daily basis rather than single heavy courses to attend in a constrained time frame. Finally, a more customized learning approach is being pursued in order to ensure that employees are always aware and up-to-date on the resources they are lacking.

Concluding, respondent G said:

“...we are moving towards a moment in which competencies will need to be constantly updated to be able to maintain competitiveness on a long-term basis since the competencies we have today might not be useful anymore tomorrow.” (Respondent G)

Key Findings:

- *Fully Digital Learning Environment;*
- *Assessment through analytics obtained by the digital learning platform;*
- *Pandemic lead to consolidation of digital learning environment;*
- *Digitalization will become at the core of learning;*

Summary Of Data Collection

Table 11 - Data Collected from Experts

	<i>Expert 1 – Respondent A (Director of Competence Hub)</i>	<i>Expert 2 – Respondent B (CEO of Professional Development Company)</i>
<i>Delivery Methods & Challenges</i>	<ul style="list-style-type: none"> • All industries nowadays are providing employees with e-learning or with blended opportunities.; • Most Employers do not know which skills employees have and Employees do not know which skills they need (Major Challenge); 	<ul style="list-style-type: none"> • Long-Term Based Digital Learning; • Online Learning Platforms (Coursera, LinkedIn Learning); • Employees are not exploiting learning opportunities (Major Challenge); • Interactivity over Asynchrony;
<i>Assessing Training</i>	<ul style="list-style-type: none"> • Participation; • Comment Cards/ Satisfaction Questionnaires; • Follow-Up interviews to check progresses; 	<ul style="list-style-type: none"> • Course Certifications, Licenses, Diplomas; • Challenge in assessing soft skills such as leadership;
<i>Impact of the Pandemic</i>	<ul style="list-style-type: none"> • Accelerated Trends; • Low Participation to self-training initiatives; 	<ul style="list-style-type: none"> • Frozen Educational Budgets; • Greater Propension to Digital Solutions compared to physical setups;
<i>Future Trends</i>	<ul style="list-style-type: none"> • Higher Investments in Digital Learning; • Bite-Sized Learning; • Need for Dynamic approach to skills development; 	<ul style="list-style-type: none"> • Hunger for Physical meetings; • Blended environment will become the normality; • Customized Learning for required needs;

Table 12 - Data Collected from Sampled Companies

	Company 1 Respondent (C) - Manager, Talent & Learning Director	Company 2 Respondent (D) - Learning Expert	Company 3 Respondent (E) - Learning Expert	Company 4 Respondent (F) - Line Manager for Learning Service Delivery	Company 5 Respondent (G) - Talent and Organizational Development Manager
<i>Delivery Methods</i>	<p>Blended Learning:</p> <ul style="list-style-type: none"> • Face-To-Face; • Digital Learning Platform; <p>The Platform contains:</p> <ul style="list-style-type: none"> • Certification Courses; • MBAs; • Any Other Form Of Deep And Transformative Learning; 	<p>Blended and Scattered Learning:</p> <ul style="list-style-type: none"> • 18 Internal Academies for Each Department; • Learning Ecosystem • Learning Inside & Outside LMS; • Group Case Studies for Network and Social Learning; 	<p>Blended Learning:</p> <ul style="list-style-type: none"> • Corporate University divided in 6 academies; • Face-To-Face; • Network Learning; • Towards a purpose driven learning; 	<p>Upscaling & Learning Experience platform “Degreed”:</p> <ul style="list-style-type: none"> • Catalogue of learning materials from different providers; • Score System based on learning activity; • Chance of positions exchange through skills acquisition; 	<p>Fully Digital Learning Environment:</p> <ul style="list-style-type: none"> • Corporate University; • Semi-Interactive Digital Courses; • Open License for LinkedIn Learning;
<i>Assessing Training</i>	<ul style="list-style-type: none"> • Participation to learning activities on the Platform; • Skill Gaps Monitoring; 	<ul style="list-style-type: none"> • Individual Analytics through new technologies • Business Impact • Individual Perspective over trainer perspective 	<ul style="list-style-type: none"> • Knowledge Tests; • Kirkpatrick 4 Levels of Evaluation; • Behavior Monitoring; • KPI Monitoring; 	<ul style="list-style-type: none"> • Participation; • Completion; • Structured interviews with employees; • “The Voice Survey”; • Large-Scale Monitoring; • Kirkpatrick Levels I-II 	<ul style="list-style-type: none"> • Initial Evaluation of the training offered; • Analytics obtained on digital platform; • Business and Team Performance; • Individual Feedbacks;
<i>Impact Of The Pandemic</i>	<ul style="list-style-type: none"> • Impact was not dramatic due to initial plan to move to digital learning environment; • Anticipated Change; • Switching to Digital Learning environment became necessary; 	<ul style="list-style-type: none"> • Adoption of a hybrid style of learning; • Manufacturing academy was in serious difficulty so had to go back to face-to-face training; • Forced Change that would have taken place in 5-6 years 	<ul style="list-style-type: none"> • Difficulty in turning tutors into virtual tutors; • Governments offering competence development; • Anticipated change that was not supposed to take place so early; • Cost efficiencies 	<ul style="list-style-type: none"> • Courses were shortened • Accelerated trends and thus need for digital learning environment • Cost efficiencies • Positive environmental impact • Negative effect on learning outcomes; 	<ul style="list-style-type: none"> • Impact was not dramatic due to initial plan to move to digital learning; • Consolidation of digital learning environment; • Cost efficiencies;
<i>Future Trends</i>	<ul style="list-style-type: none"> • Movement towards Customized/Personalized learning; • Having single Catalog for everyone will not work anymore; • Higher demand of leadership competencies, emotional intelligence, human skills and the ability to manage teams in a virtual environment; 	<ul style="list-style-type: none"> • Training departments will do also Coaching and Mentoring; • New VR, AI, AR solutions; • Continuous Learning will become crucial; • Customized Learning; 	<ul style="list-style-type: none"> • Transition to Modern Learning; • New frontiers of Online Learning still proceeding with the face-to-face ones; • Adaptive and Flexible Training; 	<ul style="list-style-type: none"> • Just-In-Time Learning (Learn when you need); • Performance Support Tools; • AI to help on the spot and suggest new courses; • Bite-Sized Learning; 	<ul style="list-style-type: none"> • Digitalization at the core of learning; • Bite-Sized learning but continuous; • Need for continuous skills update;

5. Data analysis

In this chapter the author is going to make a comparison between the outcomes of the data collection, the theory and between experts' opinions and companies' ones. To preserve clarity and consistency, the analysis is divided in three main categories which are The Learning Organization, The Impact of The Pandemic and New Trends. The process of analysis goes through an iterative approach from theory to empirical data to case-company comparison, therefore following a pattern that can preserve clarity and consistency.

5.1 Learning Organization and Lifelong Learning

Taking into consideration previous research, Learning Organizations are presented by Calvert et al. (1994) and Watkins and Marsick (1993) as continuous education opportunities providers, but also as promoters of a learning climate promoting experimentation and self-development opportunities through information systems by Pedler et al. (1991). We can say that these features are representative for all the sampled companies since they are all involved in long-term development activities through mostly similar approaches but in some cases different ones. One setup that emerged from interviews with Company 2, 3 and 5 was the presence of an internal corporate university or multiple academies as learning infrastructure. Company 1 instead abandoned the corporate university/academy approach to switch to a blended learning approach characterized by the presence of both face-to-face initiatives and digital initiatives through their learning platforms, same thing for company 4. These features are a clear manifesto expressing that the sampled companies are seeing themselves and operating as Learning Organizations. Furthermore, companies' goal is to provide employees, as stated by Respondent D, with a Learning Ecosystem, where they can exploit the learning opportunities offered on a long-term basis for their professional and personal development.

5.1.1 Learning and Development opportunities and Encouragement

As stated by Goldstein and Kauffman, the industry in which the company operates can play a crucial role. Indeed companies in the service industries are more likely prone to offering continuing education opportunities compared to the manufacturing industry (Goldstein, 1991; Kauffman, 1999). This belief is associated with the fact that in manufacturing it might be more difficult to pause daily activities to provide such training. This goes in contrast with what was found in the empirical data. Indeed, even the interviewed companies, despite their belonging to the manufacturing industry, are all involved in continuous education initiatives. The presence of continuous education programs does not go in contrast anyhow with daily activities since

companies stated that they are putting all their effort to provide employees with solutions that can fit their working hours or in case their time outside of the workplace. They are mainly doing it by facilitating the access to programs, for example making it available on all devices. In addition to that, previous research considers the technology intensity as strictly related to the range of CE opportunities that can be offered, since through electronic devices it is possible to have easier access to training and development programs. One of the main challenges when having to deliver training and development initiatives, according to Expert A, is for companies to understand which skills they need from employees and vice versa. One way to solve this according to the companies is to provide a playlist of competence development courses, allowing them freedom in participating in the ones they believe that can be more useful in their professional development, together with mandatory ones. This can easily be possible through the adoption of a digital learning platform.

As stated by all the sampled companies, the presence of a digital learning environment allows employees to have a wide range of development opportunities available and with more accessibility, allowing them to manage their time in the best way possible and to have full access to the programs whenever they want and with whatever device. Furthermore, digital platforms can also help in employees' career escalation, in fact in company 4 employees are made aware of what are the competences that are required to access their desired new position, and offered courses to work on those skills. This approach is also useful in case, as an employee, you want to be updated on your current position's requirements. In this case the platform makes employees aware of the courses attended by their colleagues with the same position, so that everyone gets on the same page. For what it concerns the size of a company, research evidence shows how larger companies are associated with larger T&D departments, this results in more CE opportunities. The interviewed companies indeed present structured T&D departments composed of Talent Managers, Learning Experts and Organizational Development Managers and Learning Service Delivery Managers.

5.1.2 Role of Organizations and Groups in fostering Learning

According to the theory, organizations should have a proactive role in providing employees with continuous education. They can do it by providing members with a wide range of opportunities of access to CE programs in order to stimulate their participation (Goldstein, 1991) or they can simplify the transfer of concepts acquired through CE to the job-setting (Baldwin & Ford, 1988; Bransford & Schwartz, 1999; Kozlowski et al., 2001). The sampled companies are adopting both approaches: for example, Company 1, 4 and 5 are providing it through their digital learning

platforms, from a wide range of certification courses to full access to external platforms such as LinkedIn Learning. In particular, Company 4 is stimulating participation to digital programs by making them aware that they could get a better position by exploiting the learning opportunities offered to them. Furthermore, from the empirical data collected, the culture and social dimension of learning is crucial as well. Models as the 70/20/10, seen in detail in the literature review, were brought up several times during the interviews. Crucial in the model is network learning represented by the 20 part. Companies indeed seem to give particular importance to the group transfer of knowledge. From the study by Crossan, Lane and White (1999) we can say that Group-Level Learning is connected to the Integrating process, meaning that individuals share outcomes to groups to sustain a holarchy system (Koestler, 1967; Wilbur, 1995) in which each layer is a whole and part of another whole. Furthermore, Respondent G from company 5 declared that to empower organizational efficiency, the company should seek to align all teams, teams indeed are now preferred to the traditional “top-players”. In some cases, like in company 2, the organization’s members take part in the training delivery, in fact, in the academies, professional trainers are put to collaborate with employees just sharing their knowledge with other members of the organization for the 10-15% of their work time. The way through which Company 2 work on the social dimension is in many cases providing employees with some case studies with real life problems asking them to reflect on a solution. In a digital environment such as Microsoft Teams they are then sent to breakout rooms and asked to share their thoughts with their peers. This vision follows the theory, which states that providing employees with the opportunity to share their experience and acquired knowledge with other members of the organization (DeRouin et al., 2005; London & Sessa, 2007) revealed to be an efficient way of transferring knowledge across the organization.

5.1.3 Monitoring and Assessing Training

As stated in previous research another factor affecting CE are active organizational control systems. Indeed, companies monitoring attendance and performance in CE activities are more likely to positively influence the transfer of knowledge between the members of the organization (Boud & Falchikov, 2006; Hummel et al., 2005). Also in this case the sampled companies showed how they are committed to provide the best continuous learning experience to their employees. In particular, while company 1 is dealing with skill gaps and participation monitoring, company 2 is focused on the business impact that the programs generated from the participation to the program, this can take place through the adoption of KPIs that have to be fulfilled in order for the programs to be effective. Company 2 and 5 strongly believe that the effectiveness of training can be assessed and monitored through analytics that can be retrieved directly on their digital learning platforms. Among the data coming from the platforms there is

participation, skill gaps and certifications of completion. Last, another way for companies to assess continuous education programs, as evidenced from company 2 and 3 interviews and as stated by the experts too, is to follow-up with individual interviews asking employees if they benefited from the program. Furthermore, peers are questioned, in order to see if what stated by individuals reflects also in their business units. This could be a solution to the main issue targeted by Expert 2 when talking about assessment. In fact, when it comes to soft skills such as leadership, it is difficult to quantify how much you have learnt over a course, it would be more efficient to tackle the issue from different sides just like explained in the previous example. Another way to do it, as done in Company 4, when a program is meant for a high number of employees, then you can try to assess soft skills acquisition by comparing their team results on a quarterly basis through targeted surveys.

5.2 Impact of the Covid-19 Pandemic

According to previous articles, the current pandemic broke the traditional way of doing corporate training, evidencing the weaknesses of the current model of corporate training. For the interviewed experts many companies were not able to cope with this immediate change, therefore ending up freezing their educational budget, the others instead were forced to switch to a digital learning environment. The initial plan for most of the sampled companies was expecting the digital transition to take place in a timespan of a few years and not a few months. For this reason we can say that from empirical data it was evident that the pandemic accelerated trends, it was like “putting gasoline on fire” as expert A said, and this was confirmed by all the sampled companies. The fact that it was an already planned change, did not affect dramatically large enterprises, but for sure the companies that started earlier with the buildup of a digital learning infrastructure came out as winners.

The other challenge in switching to digital learning was on the trainers’ side, since they added to being switched into digital trainers and made more familiar with the technologies. For sure after more than one year of digital operations companies declared to be more familiar with digital learning therefore resulting in a positive attitude towards a hybrid style of learning now that the restrictions are being relaxed. Not all the competences could be developed and trained through a digital environment, therefore the biggest challenge was the one for the manufacturing departments. The reason behind that is that it is not possible to train an individual on how to use a machine or how to manipulate a component if not physically present on the field, therefore there

have been firms such as company 3 that had no solution but going back to face-to-face training for this type of knowledge.

Another scenario that came up, also thanks to the new technology, was the possibility for employees to dedicate more time to training since they were not involved in in-office activities but also since it was easier to access programs anywhere, anytime and from any device. Unfortunately, while some governments were also supporting companies in the offer of learning opportunities during this period, apparently not everyone exploited this moment to take part in training and development programs, focusing instead on their private life and other matters as Expert A points out. The pandemic did not bring only negative aspects, in fact, from what evidenced by data from company 3, 4 and 5, the current situation brought also to cost efficiencies given that companies did not need to pay for tutor's travel expenses anymore or were not needing physical facilities to host trainings with the related material to prepare. Furthermore, for tutors of a certain age travelling and being away for days, weeks or months can be difficult and definitely not stimulating anymore, therefore distant learning managed also to make clear how this approach actually works fine. Last but not least, as evidenced by Respondent F, avoiding travel can also help to reduce the environmental impact, given that we do not have the need to take a car, a plane or public transportation to join a meeting anymore.

5.3 Future trends

When discussing the future trends that will affect training and development practices in the future years the researcher has collected different visions from the respondents. Previous research on the new frontiers of training evidenced the presence of four scenarios. In the first one training and technological development will become even closer since most training initiatives will take place in a digital environment through technology-enabled interactions. Also Expert A indeed believes that in the following years there will be higher investments in digital learning solutions. This is the case for companies 2, 3, 4 and 5, in particular, the first is convinced that new frontiers of digital learning will be supported by the introduction of new technologies in training, such as AI, VR and AR. Also company 4 is convinced that AI will play a crucial role in learning since through algorithms it would be able to suggest follow-up courses according to your preferences and to trends in your position, furthermore it could help performance support tools to boost just-in-time learning. For what it concerns the other two companies, which already present a fully digital learning environment, digitalization will become at the core of future learning while company 3 is more moderate in saying that while digital solutions will be prioritized in the future, there is going to be hunger for physical meetings and thus interactions. This vision matches Expert B's one, since he is also convinced that rather than a fully digital learning environment, the most adopted solution will be a blended approach with both digital and face-to-face solutions.

The second scenario that is going to take place is the prioritization of the trainee's competences instead of the ones of the trainer (Rothwell, 2002). This vision coincides with both experts' ones, in fact, Expert A sustains that there will be need for a more dynamic approach to skill learning since at the moment employers do not understand which are the skills they need their employees to have and viceversa. Therefore as Expert B points out there will be a customized learning approach to skill learning, so that both parties, employers and employees, will benefit from the acquisition of the required skills to reach specific goals. This is something on which all the sampled company agree on, in fact they confirm that we are moving towards a learning environment in which there is going to be an attention to a more customized and personalized learning, in which the employee will have more freedom in moving across the opportunities that his organization is going to offer him. This vision also involves more responsibility from the employee side, in fact according to respondent E (Company 3) we are moving towards a "modern learning" environment. Modern learning theory sees skills acquisition as an active process based on the active participation of the individual. This goes against the traditional vision according to which learners were viewed as passive sponges listening to their teachers' classes (Wilson, Peterson, 2006). This can be connected to the way the sampled companies are behaving in terms of expectations from their

employees. What was evidenced from the empirical data is that companies are expecting an active participation from the employee when it comes to training and development initiatives, they are not forcing the participation to specific programs anymore. Their contribution to that is increasing and making more accessible opportunities for learning, therefore providing them with all the means they need to keep developing themselves through their professional career.

The third scenario mentioned London is about the figure of the trainers, that according to experts is going to be more and more professional, with the introduction of criteria to fulfill in order to be able to deliver these activities (London, 2011). This does not align with the actual situation in the sampled companies, since for example in company 2 not all the trainers are professionals. Some of the trainers are indeed employees spending up to 10-15% of their working hours sharing their knowledge and their skills with other colleagues. The social dimension of learning in fact appears to be shared by all the sampled companies and a lot of attention is put into it. Therefore companies now believe that knowledge can be also transmitted through shared practices and through highly-skilled members that make themselves available to help their peers in growing as professionals.

The last scenario suggests that training is going to be increasingly outsourced, since organizational leaders are afraid that they might be not able to get greater outcomes through external individuals providing for training (Rothwell & Gerity, 2008). From what the empirical data show, companies are more likely to outsource training when it is about specific identifiable skills, not involved with the company's culture of vision. When it comes to that kind of knowledge, companies are more prone to let people inside of the organization take care of it. Furthermore, the sampled companies believe that in some cases it is better to take advantage of third-parties platforms and buy "on-the-shelf" programs, this would allow them with easier access and in some cases lower costs. The transition to a digital learning environment will also contribute to a higher tendency to outsource training and development programs rather than having to organize them internally, since it would become easier to pick a course you are interested in with a few clicks yourself instead of expecting organizations' to offer them. One example coming from company 5 is the possibility the organization provides its employees with freely accessing external platforms such as LinkedIn Learning through a full-access pass. This gives the company the opportunity of adding extra value and a wider range of choices to the opportunities it offers in terms of training and development. Another example to mention is company 4 having its platform providing courses from different external platforms and internal ones made by the company as well.

Another trend that was evidenced by empirical data but not from the theory is connected to the structure of the courses. When it comes to guaranteeing continuous education, the respondents were clear on how there is a tendency to move towards a more Bite-Sized Learning approach. Bite-Sized learning is meant in a way that is opposite to traditional learning, in fact the “Bite-Size” is not the criteria to keep into consideration, but rather the learning objectives. While traditional learning is built up on reaching more learning objectives at once, with bite-sized learning the focus is on one learning objective at a time. This can be also connected to Microlearning, that is a way of delivering knowledge in small specific fragments. Microlearning can take place online through media materials or articles and it is more focused on the approach rather than on the objectives (Soh, 2017). The importance of Microlearning and Bite-Sized Learning is connected to the fact that with the new frontiers of learning individuals have access to an infinite amount of knowledge. For this reason, on one side employers are expecting more given to the amount of available opportunities while employees have inevitably reduced their attention span. Nowadays learners need to feel engaged and not passive in the process of knowledge acquisition while being able to track their progress and to participate anywhere and anytime, on any device (Soh, 2017). Finally, according to respondent C there will be a higher demand for leadership competencies, emotional intelligence, human skills and the ability to manage teams in a virtual environment.

6. Discussion and Conclusions

The sixth and final chapter is meant to present the conclusions of the study. After a recall of the research purpose, the author is going to provide the answers to the research and sub-research questions. The author is going to then discuss ideas for future research. In concluding, the researcher will present the key findings of the study.

6.1 Discussion

As stated in the first chapter, building a learning organization by promoting and sustaining lifelong learning can play a crucial role for fostering and guaranteeing vitality and market relevance to organizations. With the advent of the Covid-19 pandemic, habits and processes within companies were dramatically affected, having the workplace and many operational activities to adapt to a digital based environment. Due to this, the current situation evidences how a set of innovative solutions is required to implement and sustain lifelong learning in organization have to be identified to maintain long term relevance in the business environment. In addition, a clear picture on how companies are adapting their training and education offering to this unstable situation was missing. Thereby, it seemed interesting to study what companies' general strategic approach toward lifelong learning is, and how and if it has been affected by the current pandemic, with an eye on the upcoming trends for continuous education, all from companies' perspective. The purpose of the study was to run a comparative study among multiple large enterprises operating in the manufacturing industry, in order to detect any congruences or differences in terms of practices related to lifelong learning initiatives and support. The main idea behind the research is providing an empirical-based overview of how companies are integrating lifelong learning in their workplaces. The study was limited only to that but also on how the practices around this matter have been affected by the current pandemic and, to collect perceptions on what are the future trends concerning continuous education in organizations.

Following up, the research questions and sub-questions are stated:

Research Questions:

RQ1: "How enterprises are delivering Lifelong Learning within their organizations?"

RQ2: "To what extent these practices were affected by the current Covid-19 pandemic and eventually adapted?"

Sub Question:

“How do companies perceive that the pandemic will change their training practices in the future?”

Given that the author is aiming to provide a detailed and consistent explanation to the research’s conclusions, from this point onwards the fundamental to the conclusions are going to be analyzed in detail.

6.1.1 Learning Organizations

Starting from the definition of Learning Organization, empirical data demonstrated how all the sampled companies are currently operating as such, by promoting a culture of experimentation and self-development. Furthermore, the initial idea that companies in the service industry are more involved in continuous education activities due to the highly dynamic business environment and technologies involved was partly refuted by the finding that all the interviewed companies, involved in manufacturing, are putting a lot of effort in delivering continuous education opportunities. Of course the study was limited to only five enterprises in the industry, therefore to fully confute this theory a study on a wider number of organizations should be done. Furthermore, a reason for that can be that governments and the European Union are pushing towards more lifelong learning initiatives since they believe that they could be a way of decreasing overall unemployment among countries. For these reasons, many companies are currently being incentivized to take part in these initiatives. Also the role that companies need to have in continuous education was discussed, since they need to be proactive by supporting and making more accessible as many opportunities in that regard as possible.

6.1.2 Delivering and Fostering Lifelong Learning

The result from the sampled companies showed the presence of structured T&D departments, organized in either corporate universities, or reduced to digital LMS/learning experience platforms. While in some cases blended learning, as a combination of face-to-face and digital training, is preferred, also fully digital learning environments are starting to take place. Moving to digital learning, the platforms are allowing individuals to create their professional profile, on which their current and freshly acquired skills are listed. For what concerns the courses, a range of Certification Courses, MBAs, Seminars and Workshops are provided as in a catalog through which the employee can navigate and pick the ones he is more eager to participate. About this, experts have expressed the current issue in corporate training, that refers to the fact that from one side companies cannot define which are the skills they need from the employees, and on the other employees do not know what new skills they need for their positions in the companies. Another challenge for companies is to ensure all employees actively participate in the offered T&D opportunities.

From the results of the research, companies are taking a moderate position with respect to pushing employees to take part in continuous development programs. What they are doing indeed is providing them with a learning infrastructure allowing them to navigate through a wide range of opportunities, trying to stimulate their interest and commitment towards learning and self-

development, still without forcing them to actively participate. No course or program is mandatory, besides of course compliance courses that need to be attended to fulfill regulatory requirements, so a lot of trust is put on the employee. An interesting way through which self-development can be promoted is through career progress expectations, in fact in one of the sampled companies, whenever an employee wants to change position in the organization, he is made aware of the skills and knowledge he needs and furthermore offered with courses covering those matters.

Another solution found in the collected data was the setup of a score system, the points of which are directly connected to the activity of the employee on the learning platform. For instance, the more courses an individual takes, the more articles and thoughts he shares, the higher the score. In this case the incentive can be connected to the positive impression peers and employers might have of the actively participating employee. For what it concerns the sources of the available learning materials, it can vary, in fact some platforms present a mixture of internally-made courses and “on-the-shelf” ones bought from external providers. Usually internally-made courses focus more on a company’s culture, vision and mission while the more outsourced content concerns courses or programs on more specific skills.

Besides the offering available on the platforms, some companies also offer free subscription to external learning platforms such as LinkedIn Learning, to incentivize the employee to try the study material, approach, or interface he prefers the most. Apart from the platform-related dimension, another dimension widely covered is the transfer of knowledge through groups. In many cases it seems to take place as direct discussions resulting from assignments or projects, therefore individuals find themselves talking about their personal outcomes and exchanging ideas with their peers to pursue common goals. In other cases, members inside companies considered as more skilled in a field are asked to take part in training initiatives where they act as trainers themselves, in this way knowledge is shared among the organization without the need of outsourcing external tutors. Furthermore, these activities are not expected to take place as extra work duties, but instead they are already part of the working hours, that is an index of companies caring about maintaining a culture of a learning organization. The social dimension of learning can be also directly connected to technologies and digital learning platforms. Through the platforms indeed, organizations members can share their freshly acquired skills, discuss articles or trending topics and so on. There is also an indirect positive effect related to the use of digital platforms, in fact in some cases employees can have suggestions on which courses to take based on their peers previously attended ones. In this way, for example, an employee working as a Project Manager is

going to be able to see which is the knowledge required and the trending skills that other individuals in the organization and with the same role are currently accessing.

Another covered topic was how training activities' effectiveness was assessed, in order to monitor the long term result of the initiatives. The main focus was mainly on soft skills, given that for practical knowledge it is easier to establish if an employee acquired a specific skill or not. When it comes to soft skills instead, assessing the effectiveness is a hard task since these types of skills are not quantifiable, therefore they require a higher monitoring activity. Therefore, to try to solve this challenge, companies are currently using a mix of questionnaires, structured interviews and recurring surveys on a large scale. The idea is to tackle the challenge from more perspectives, the individual one, the group and the business dimension. When it comes to skills such as leadership, a first interview is made with the trainee that is being asked how he feels after the course and how he is improved in that matter. Right after that, a group monitoring is done, also the trainee's peers are in fact interviewed and being asked if they actually see any improvement in that matter from him. In this way it is possible to check if the two visions match, in that case the skill is more likely to be acquired and therefore the program to be effective. Last but not least important, the business impact the program has on the overall group result plays an important role in assessing the extent to which a program was effective or not. The digital analytics features are also widely considered as an important source of data to evaluate the progress of an organization member. Nevertheless, with soft skills it is still a hard task since the main insights you can get from the platform is mainly participation. Participation or attendance indeed do not represent a valuable solution to the issue since it is not directly connected to how well a skill is acquired. For example, it might happen that an individual takes a six hours course and fully participates, but the extent to which he was actively interacting and learning through these six is not possible. Especially if digital, it is likely that individuals might skip the course until the end just to get their certificate of attendance but yet not actively learning.

6.1.3 Impact of the Covid-19 Pandemic

Moving to the second main question of the research, that is what was the impact of the current Covid-19 pandemic on the training and development activities, different aspects have to be considered. First thing to mention is the digital transition which characterized all companies. Even though it was already planned to be happening in several years in some cases, the pandemic accelerated the process of digitalization of learning, given that there was not the possibility to meet in person anymore. The winners in this case were the companies already building and implementing digital infrastructures for learning, since they were not affected at all by this unexpected shock. Other companies had to rush in finding new solutions in the least time possible and therefore were highly stressed out by the situation. The main challenges with digital learning are related to turning traditional trainers into digital trainers but also the extent to which technical learning can be conducted. For technical learning it is meant learning for the use of machines or for practices in the manufacturing processes. In this case the return to face-to-face learning became inevitable after several months. This transition does not carry only negative aspects such as the loss of engagement, learning experience and less quality in terms of learning outcomes, indeed, all the companies also noticed positive aspects related to it.

Among these the interviewed companies mentioned reduction of costs related to the fact that travel expenses for trainers and trainees were not necessary anymore, costs of renting or using facilities to make the courses and they mentioned also the positive impact it had on organization members that had to travel a lot but suddenly they were presented with a smarter alternative to that. The latter is for sure a positive impact for employees that are not so young anymore and eager to travel for work being far away from their families for days, weeks or months. To mention also the positive environmental impact that the absence of travelling led to, given that work trips were not required anymore. After more than one year since the pandemic started we can say that all the ranges of age became more familiar to the digital environment and the technologies themselves, due to the several online meetings, digital groupworks and so on, resulting in the adoption of a hybrid style of learning and participating to the company's daily activities. Another fact to mention is that while some companies had to freeze all their educational budgets, governments started to take a position making it clear how they give importance to training and development initiatives. In many cases the governments were paying a partial amount of the employees' salary so that they would dedicate their time to improve their knowledge and skills, but unfortunately not everyone took advantage of this occasion.

6.1.4 Future Trends

The last point on which the research focused on is the future trends that companies are perceiving regarding training and development activities. Through the collected insights we can draw different scenarios in this regard. Starting from the first one, training and technological development will become even closer since most training initiatives will take place in a digital environment through technology-enabled interactions, this would be possible thanks to higher investments in digital learning solutions. Furthermore, new frontiers of digital learning will be supported by the introduction of new technologies in training, such as AI, VR and AR. In particular, AI will play a crucial role in learning since through algorithms it would be able to suggest follow-up courses according to your preferences and to trends in your position, furthermore it could help performance support tools to boost just-in-time learning. It is clear how digitalization will become at the core of future learning but without eclipsing totally face-to-face solutions.

The second scenario is connected to the prioritization of the trainee's dimension since a more dynamic approach to skill learning is required since employers ignore what are the competences they might need from their employees and vice versa. The solution to this issue is going to be a transition towards customized and personalized learning, in which the employee will have more freedom in moving across the opportunities that his organization is going to offer him. This vision also involves more responsibility from the employee side, therefore reflects the movement towards a modern learning environment. In offering these initiatives, companies will be expecting an active participation from the employees, indeed they are not forcing the participation to specific programs anymore. Their contribution to that will be increasing and making more accessible opportunities for learning, therefore providing employees with all the means they need to keep developing themselves through their professional career.

According to the third evidenced scenario, the figure of the trainer is going to be more and more professional, having to fulfill compliance imposed by governments. While that seems to be the case, companies are also evaluating internal solutions for knowledge transfer through the usage of organization members to share their skills and competences with their peers.

Connected to this, the fourth scenario refers to the extent to which training is going to be outsourced. From what is evidenced by the empirical data, training will become highly outsourced thanks to the popularity on-the-shelf training in digital platforms. This new solution would allow companies to easily access courses and programs from external providers to allow them with easier

access and in some cases lower costs. This gives the company the opportunity of adding extra value and a wider range of choices to the opportunities it offers in terms of training and development. The last trend is connected to the structure of the courses. When it comes to guaranteeing continuous education, there will be a tendency to move towards a more Bite-Sized Learning and Microlearning approach. The importance of Microlearning and Bite-Sized Learning is connected to the fact that with the new frontiers of learning individuals have access to an infinite amount of knowledge. For this reason, on one side employers are expecting more given to the amount of available opportunities while employees have inevitably reduced their attention span. To conclude, in terms of skills there will be a higher demand for leadership competencies, emotional intelligence, human skills and the ability to manage teams in a virtual environment.

6.2 Key Findings and Conclusions

When aiming to address the first research question, therefore focusing on the way companies are delivering lifelong learning in their workplaces, the main findings to be presented are the following:

Companies are organizing their learning activities within either *digital learning experience platforms* (in a fully digital environment) or present *internal corporate universities or academies* in which they mostly adopt a blended learning approach (half digital-half in person). To mention, also the introduction of a score system to incentivize employees' engagement and active participation in learning and development activities by sharing previously attended courses, skills and reflections, appeared to be an efficient way of fostering learning. Furthermore, results showed how courses are *developed internally* when it comes to matters relating to the company's culture and practices, but are widely *outsourced* when it comes to other specific skills. So they are either *internally developed* and bought *on-the-shelf* or *free subscriptions* for external platforms are offered to organization's members. In conclusion, the *social* and *network* dimension in the transfer of knowledge within the organization appeared to be crucial in sustaining an environment supporting lifelong learning.

For what it concerns the second research question, focusing on the impact of the Covid-19 pandemic, the findings are the following:

The shock caused by the pandemic led to an *acceleration* in *companies' process of digitalization of learning*. For what concerns the overall effects, being at home *reduced not only costs and effort* in delivering training and development initiatives, by making them *more accessible* from anywhere at any time thanks to electronic devices, but also the *environmental impact*, since there was no need to travel anymore.

Lastly, when addressing the sub-question, with a focus on the future trends of learning and development, interesting views were collected, these are:

Training will be *more linked to technological development* and there will be new frontiers of digital learning characterized by AI, VR, AR, therefore leading skills and knowledge to be obtained *just-in-time* through AI.

Learning initiatives will be more *customized and personalized* given that the same skills might not be needed or useful by every member of the organization. Furthermore, Training and Development

will become *highly outsourced*, given that digital platforms offer easy access to external courses or activities. Finally, courses will be re-adapted, focused on having Bite-Sized and Microlearning, i.e. with single learning objectives every time and with more direct and short approaches with higher frequency to ensure that continuous learning is fostered.

6.3 Future Research

Skills acquisition and update became crucial in every sector since the traditional model where an individual acquired competences that would have lasted for all his professional life is no longer valid. Nowadays there is the need of moving toward a continuous education and lifelong learning approach to competence acquisition given that the skills that we acquire today might become updated in a short term timeframe. Furthermore little research was conducted on the effect of the COVID-19 pandemic on the companies' offerings for training and development. Therefore, the idea of the researcher was to investigate this dimension directly from the companies' perspective, in particular large enterprises.

Starting from the industry considered, manufacturing was the chosen one for the research, therefore it would be interesting to develop a similar research within the service industry, that might be an even more challenging environment for what concerns continuous education. The second detail to consider is the size of the sampled companies, that are large enterprises. The choice was related to the fact that bigger organizations are associated with more structured T&D departments, leading to a more likely presence of continuous education activities. At the moment it seems difficult to conduct the same study on start-ups and really small realities, but it might be interesting to see how Small and Medium-Sized Enterprises are behaving. From a geographical point of view, most companies tend to share their practices among regions or worldwide with the advent of digital learning solutions. For this reason also investigating if geographical differences imply diverse approaches to continuous education. Lastly from this side, the current study was made keeping in consideration the companies' dimension, therefore research from the employees' perspective would be needed to identify what are the needs and insights to better help companies in improving their offerings in terms of continuous education.

Moving on, another detail to mention is that the Covid-19 pandemic was a relatively recent event and we are still in the middle of it, therefore the research was frozen in a point in time. Due to this, the results might evolve during the years, therefore it would be valuable to see what are the long-term effects of the pandemic and whether the evidenced trends in the research will actually occur or not.

APPENDIX

Interview Guide

Introduction of the interviewee:

- Company
- Role in the company

Training and Lifelong Learning:

- How is your company working with employees training?
- Is your company working on long term development for employees?
- What kind of knowledge is important to support in your company?
- What do you think about In-House training and Outsourced training? Which is more effective in your case?
- What is the way by which you monitor and assess the results of the training?
- What typology of training revealed to be more effective? Why?
- What is the importance of individual learning? Does it affect also the groups?
- What are the main technologies for training that have been integrated in your business?
- What is the company's perception about switching to a digital environment for training?
- Do you believe groups can support the transfer of knowledge among individuals?

Current Pandemic:

- Did the pandemic affect your training practices?
- Can you give me an example of something that changed?
- What are your expectations for training in the post-Covid 19?

Final remarks:

- Lastly, is there anything that you want to add or comment to this interview?

Synopsis

Given the current challenges companies have in remaining relevant in a dynamic and challenging market environment, a more serious attention should be addressed to the concept of continuous learning in the training of employees. In addition, the current pandemic opened up new scenarios for training practices, which might be completely re-adapted for the upcoming years. Considering these phenomena, it is interesting to find out what are the training practices through which enterprises are trying to deliver long term development of employees but also to what extent these practices were affected by the current Covid-19 pandemic and eventually adapted. This will be achieved by interviewing experts in corporate training. As a matter of fact, the aim is to get insights about how the organizations' are currently dealing with lifelong learning in training, but also how they are planning to reorganize themselves after the current pandemic.

A Message to contact respondents (through FTK)

Dear Y,

I am Giovanni Angelucci and I am writing my thesis with the help of First to Know Scandinavia. As X has probably anticipated to you, the topic of my master thesis is about how large enterprises are doing with continuous training and also how these practices were affected by the current pandemic.

I have attached to this email a brief synopsis of my research area. I would really appreciate if we could set up an interview so that I can ask you some questions about this topic.

When you would be available? Also, if you think that it would be suitable to interview another person to gain more insights from your company, please let me know.

Thank you in advance.

Kind regards,

Giovanni Angelucci

3.B Message to contact respondents (individually)

Good morning,

I am Giovanni Angelucci and I am writing the thesis of my master in "Innovation and Industrial Management" at the University of Gothenburg.

The topic of my thesis is about how large enterprises are working with continuous training and development and how these practices have been affected by the current pandemic and you can find attached a brief summary of my research's topic. Given a previous assessment of X and your position within it, I would really appreciate it if you could give me a time slot to conduct a short interview to have your perceptions about this theme or if you could redirect me to someone within your company that would be willing to contribute to my research. Please let me know your availability.

Thank you in advance.

Regards,

Giovanni Angelucci

Interviews Details

Date 2021	Interviewee	Respondent	Time	Language	Tool
25 March	Expert 1	A	30'	English	Zoom
29 March	Expert 2	B	20'	English	Zoom

Date 2021	Interviewee Role	Respondent	Company	Time	Language	Tool
9 April	Talent Development Manager	C	1	30'	English	Zoom
14 April	Learning Expert	E	3	35'	English	Microsoft Teams
15 April	Talent Development Manager	G	5	40'	Italian	Zoom
16 April	Learning Expert	D	2	35'	English	Zoom
3 May	Line Manager for Learning Service Delivery	F	4	40'	English	Microsoft Teams

Summary Of Interviews

Interview 1 [Expert A]

Respondent A is the director of a competence hub operating on a regional level the purpose of which is to determine, organize, develop and match practical initiatives for the business community's and individuals' adjustment needs in the long term (The Organization's website). The organization operates across 5 business areas: *Vehicle, Transport, Technology/Industry, Retail and Tourism*. Each business area is characterized by different features, people and challenges which are discussed by the organization together with stakeholders of each business in order to identify and meet their needs. EU directly sponsors the organizations' initiatives to deliver long term development for individuals in organizations. While the European funding look into the individual perspective, they focus so much into the company perspective. Therefore the competence hub is trying to leverage the two perspectives, individuals and companies. The organization's activity in support of the companies starts by evaluating the required training and then procuring it from service providers for finally organizing it. When asked which training delivery is better suitable for delivering long term development, and to which industry, *Respondent A* pointed out that moreover all industries nowadays are providing employees with e-learning or with blended opportunities, but also that the focus should be on another issue. First of all, he affirmed that most of times employers don't know what are the skills that staff members have, which is one problem. The second problem he stated is that also employees don't know what skills they need in order to adapt to the change, so they don't have an understanding of what they actually need in terms of skills. He stated also that this is one of the major challenges they are facing as a training supporter organization, given that the businesses are not mature enough to work strategically with upskilling and rescaling their staff. When *Respondent A* was asked how the effectiveness of training was assessed, he stated that the key indicator in assessing it is the participation to the training and subsequently what are the features of the participants. The second way of assessing it would be the use of questionnaires, still the organization has not performed many given that it was founded recently. The goal of the questionnaires is to do a follow up and investigate whether the individual feels that the training actually helped him to fill the gaps he thought that might have limited his career expectations, and whether those expectations have now made him more confident as a professional and to solve the required needs and better adapt to change. According to *Respondent A*, the pandemic has accelerated trends that we have already seen before. It was just like putting petrol on fire, accelerating everything. He states that the retail business is probably the best example of that, because we were already having a trend to moving towards more e-commerce solutions such as shopping online, but with everything closing down the switch was made faster.

Anyway, a very worrying trend is pointed out by the interviewee, the amount of competence development initiatives and time spent by employees. The temporary layoff system in Sweden evidenced, according to him, that in a moment in which not having to work could have been used as an occasion to work on training, around 600.000 people decided to spend time doing something else. In this way despite time available and opportunity to train increased, the actual training decreased. When it come to the future of learning and training, Respondent A believes that a new ecosystem is emerging. For example, some countries are starting to modify their labor laws to make easier to put people in layoff because they think that it might benefit the business environment. As a compensation for that, they have added extra opportunities for employees' skills development. The new ecosystem allows employees to temporary leave jobs, still keeping their employment, while participating to learning programs and still getting up to 80% of their initial salary, which is paid entirely or partially by the government. Then, added Respondent A, trade unions and companies should work together to identify the needed skills, how to acquire them and so on. Furthermore, trainings should be more synchronous and much more flexible. While back in the days you took a year off to pursue a MBA, now things changed and people are needed in the company while pursuing the acquisition of new skills and knowledge. Individuals' role in participating to these programs is going to become central too, and lead to better results since it would be self-driven personal development.

Interview 2 [Expert B]

Respondent B is the CEO of a company involved in helping organizations and its members with professional development. The purpose for this company is to provide a service for lifelong learning for departments through a subscription service where they offer different tracks where organizations members can meet some of the world's best designers in different aspects and have them as tutors. The offer goes on for however long period and individuals want to stay in the program. For this reason the company's activity doesn't take place for just a couple of days and it is not like a conference, that is one day. The company keeps into consideration whatever represents an ongoing, lifelong program, given that they consider the current system to be broken in the way companies try to educate employees by just sending them to two or three day course once a year or once every second year. According to Respondent B there is a new trend of people away from in person training sessions where you either gather a lot of people like 10 or 20 people in a room together and try to learn something over three, three days or so. Other options are also being offered such as LinkedIn Learning and Coursera and everybody else is fine with learning through media materials and online questionnaires, especially, since you can do this training at your own convenience, and in any place with just an internet connection. But despite that, the respondent

thinks that this asynchrony can be considered more of a bug than a feature. The reason for that is that most of times this ends up not happening. In particular, people sign up for these things but they don't take any courses or they start something, but they never finish it. For example, the respondent continued, some companies signed up for LinkedIn learning for all their employees, and then when they sort of make a review, but after a year, they can see that no one has logged in. In this way it actually doesn't help them it's just a way to cheer up employees offering those many possibilities, but without a specific purpose.. This, according to the respondent, doesn't really help the employees, and it doesn't really help the company either, because it won't help employees to develop, but it is still preferable for companies to offer it since it does not really cost much per individual. When judging this practice, the interviewee defined it as a “cheap way to get rid of a bad conscience”. Jumping to the program they are setting, it presents materials that can be read in between sessions, but then sessions are live, together with industry experts and individuals having the same roles in other organizations, in order to discuss challenges together. The idea is delivering a blended forum with materials provided in advance and then having interactive meeting every two weeks or every three weeks or so. As stated by the respondent, assessing whether a training initiative was effective or not it is a difficult task. In opposition to courses releasing diplomas, licenses or validations, assessing courses meant for strengthening soft skills such as leadership, is really difficult. When it comes to them, the respondent continued, the choice of a questionnaire might not be effective when it comes to assessing training, since those skills cannot be quantified in numbers for example. According to Respondent B, during the lockdown many companies froze their educational budgets focusing on a grey short term perspective. This of course impacted the possibility for employees to attend any course or class in many companies. Nevertheless, continued Respondent B, in a long term perspective, people are getting used to online learning platforms and to learn interacting through a screen. Anyway when it comes to face-to-face training, the attractive part for employees is not only about the training itself, but also the motivation linked to the experience around it, like for example attending a conference in another country. Of course, concluded the interviewee, given that at the moment it is not possible to travel like we used, these online tools such as Zoom, Hangouts and so on helped to limit these issues. After the pandemic there will be, according to Respondent B, hunger for physical meeting in physical settings, therefore having a pendulum swinging back and forth towards meeting spaces and conferences or classes. However, even when everything will go back to normal, there will be a more blended environment, with a mix of online learning and physical meet ups. Many companies are currently seeing training as just a way to make a nice impression on employees and stakeholders, such as with sustainability courses where they care only about ticking a box saying

“done”. What they should focus more on indeed is providing the right trainings for the skills that can help employees becoming better professionals and to perform better in their position.

Interview 3 [Company 1]

Respondent C is working in the talent management and development space of her company, taking charge of the EMEA region, including Europe, Middle East and Africa. In particular, her duty is not only to work with training but it is overall holistic talent development, that represents the main goal when it comes to development. The talent management and development team operates always in the long-term and her duty is to assess the inter-relationships between talent assessment, talent management and talent development.

Talent management evolves around first the assessment of the most critical talents in every organization and business function, then moving to the process of putting them through developmental opportunities so that they can grow and become leaders of the organization. For this reason talent management is strictly linked to talent development. Respondent C evidenced how programs are mainly in talent development since talent management is more about assessment of employee performance employee talent, succession planning for the most critical roles in the company and then how that translates into developmental opportunities for those successes. The main goal of the programs is to grow employees in a long-term direction. When going into detail, respondent C said that the programs are very blended due to the wide span of development opportunities that her company offers to its members. The method used is the so called “70-20-10” approach. In particular, the 70% of development comes from the job itself (on-the-job training), where individuals are gradually asked to expand assignments, lead a team and so on, in order to do succession planning and make people ready to get promoted to leadership roles. The second part, the 20%, is divided in two. The first half comes mainly from networking opportunities, in detail, what are the mentoring or coaching opportunities that the company can offer to its employees or also how the company can encourage employees to get an external Master in Business Administration (MBA). The second half of the 20% is connected to exposure, so how they can be exposed to their higher supervisors in the senior leadership team or for example experts from other organizations. The remaining 10% is represented by the training itself, referring to the kind of learning the company is offering. The interviewee claims that in the past the company used to offer training in terms of classrooms, but now it got an online dimension, including certification courses, MBAs or any other form of deep and transformative learning, following the holistic model of learning and development that the company is currently adopting. One example of program for development are Graduate Programs, that is meant for young talents in the company. The graduate program allows them to go through the insertion of these young talents in multiple and bigger roles

in order for them to grow as professionals and get an enterprise or “helicopter” view. Another example are programs meant for female talents, having the main aim to increase female representation in the organization and to insert high potential female talents into development programs in order to accelerate their growth in the future. Last, the respondent adds, the company offers another program that is meant as an accelerated growth for senior managers level people, in order to turn them into directors. The program mainly is focusing on converting them into leaders, getting them a MBA, how to give them an inter-functional or inter/cross-regional assignment, so that they can step up to a director level. In order to assess the effectiveness of these initiatives, adds respondent C, participation plays an important role. In fact, checking how many employees are registering and coming into the platform the company offers for those initiatives is a good indicator. Nevertheless, what is more important to the interviewee are returning users. For returning users she means employees exploiting the training platform at the best, coming back on a monthly basis to learn. Another indicator for assessing the effectiveness of these initiatives are skill gaps. Skill gaps are initially measured and inserted in the system all together. Therefore, the programs are then suited accordingly to the skill gaps that each individual has in order to fill them. Overcoming this skill gaps, concludes respondent C, is another clear sign that the designed programs were effective. When talking about the pandemic, respondent C evidenced how it did not have excessive effects on what were the initial development initiatives the company was carrying. The company indeed was already moving towards a more digital environment for learning. Despite this transition was already planned, it was not meant to be for 2021, she adds. The pandemic in fact, accelerated it to 2020 and the digital transition became a necessity besides and ambition. Furthermore, all the previously mentioned programs such as the female development one were moved to a digital environment. Even if this transition might look difficult to implement, having an initial plan to do it helped the company to take the step easier, the pandemic simply accelerated the process. According to respondent C, the world is headed towards the so called customized learning or personalized learning. Having a catalog of choices trying to satisfy everyone’s need is not sufficient anymore, since the same skills might not be required by everyone in the company. For this reason, to fit each employee learning need, the training companies are starting to offer are really customized. Furthermore, there is an higher demand of leadership competencies, emotional intelligence, human skills and the ability to manage teams in a virtual environment.

[Interview 4 \[Company 2\]](#)

Respondent D works as a learning expert in the group HR of his company. Despite sitting quite centrally in the company, learning experts in Company 2 are decentralized, i.e. they don’t go into

details when coming to the whole training and what people should learn close to the business. In particular, Respondent D role is to support the different academies delivering the training and helping them in their decisions. The support comes mainly with new ways of learning and methodologies to new ways of thinking. The interviewee is also involved into the development of a new IT structure to build a learning ecosystem and also helping the spread of the learning culture across all the company. As Respondent D explained, the way Company 2 is delivering training is scattered. Mainly, the company is organized in internal academies, 18 to be precise, each for any function, from sales to finance and manufacturing. In the academies few of the trainers are full time ones, in fact, many of the tutors are not professionals but employees sharing their knowledge and skills with other members of the organization for the 10-15% of their worktime. This means that training and development is scattered not only in the delivery methods but also in the individuals involved in the process. Taking into consideration the 70-20-10 framework, what the company is trying to do, adds the respondent, is to concentrate more on the formal training for individuals themselves, the social collaboration and learning in the workflow. The social dimension is in fact important to Company 2, for example, what they do in many case is providing employees with some case studies with real life problems asking them to reflect on a solution. In a digital environment such as Microsoft Teams they are then sent to breakout rooms and asked to share their thoughts with their peers. Training should involve always discussion leading to involvement, since respondent D believes that sometimes learning should be also questioning yourself why you are doing it and not just sticking to some course in a limited time framework. For what it concerns the place where training happens, even if not considered as a training platform, continues Respondent D, training and development takes place also on tools such as Microsoft Teams since the company is willing to take a step forward with respect to traditional learning. In traditional learning companies have the belief that the Learning Management System (LMS) has to be considered the only training platform. What company 2 is doing is trying to transform training into a daily activity that can take place in different environments and with different methodologies and tools. The main goal, added Respondent D, is to build a learning ecosystem instead of just having a LMS which is the actual situation. Furthermore the idea is to transform training in smaller bits of content that each person can choose from, moving in the direction of customized learning in order to make the employee more eager and adaptive to the dynamic requirements linked to the fast-changing business environment. For what concerns the assessment of the training initiatives, Respondent D thinks that the introduction of new technologies will help drastically the assessment processes. The idea is to create profiles for each employee to then track their progresses while developing new skills. At the moment many companies, included Company 2 are using LMS for tracking the completion of training programs.

Still, the interviewee added, completion might not be a correct indicator, since it does not ensure that the learner actually absorbed the learning. For this reason Company 2 is looking mainly to concrete indicators on a macroscopic perspective, such as business impact. Furthermore, the core of the company's interest, when it comes to assessing the quality of training, is on the individual perspective, not the trainer's, the environment or the classrooms. It is so because at the end of the day, concludes respondent D, the most important thing for the employee is having absorbed what he learnt in order to put it into practice. For sure, said Respondent D, the current pandemic lead Company 2 to the adoption of a hybrid style of learning. This style involves face to face classes, virtual learning and forum facilitators due to the many fields that the academies have to cover. The academy that faced more difficulties in this period was the manufacturing one since it is difficult to train employees virtually on matters that crafting. For this reason, they had no choice but going back to face to face training to avoid standing still for too long. Finally, for what concerns the digital transition, Respondent D, admitted that it was not a priority for the company, in fact, if it was not for the pandemic, the process would have took up to 5-6 years to take place. Therefore, the pandemic dramatically accelerated this transition because of the desperate need to find solutions to the current situation. Mainly, the current situation contributed to boost the change. According to Respondent D, there are many ongoing trends. The first one is that training departments will not be in charge anymore of just doing courses, contents and materials but also supporting the organization with coaching and mentoring. From a technical point of view, new frontiers of delivering training such as Augmented Reality (AR), Virtual Reality (VR) and Artificial Intelligence (AI) are being adopted. Furthermore, new Learning Experience Platforms (LEP) are becoming popular, having all the knowledge in one place and also being set to offer an adaptive and customized learning to employees. The most important trend to mention according to the interviewee is that continuous learning is going to become crucial. The reason behind this is that while in the past an employee could work his whole career with the same set of skills, the new challenging business environment makes it difficult to keep up with the same knowledge forever. Therefore employees should become keen on keep adapting their skills to what the market needs, in order to preserve the organization's competitiveness, but also to ensure them lifelong employability.

Interview 5 [Company 3]

Respondent E works as a learning expert in the Learning Expertise and Development department of her company. Going into detail, Company 3 has an internal corporate university and her role within it is to secure the quality of the trainings the company offers. Furthermore, she has been working for many years with adult learning, for this reason she is currently supporting

management teams in the organization with the development and choice of methodologies of training. but I'm working with, within that department called Learning expertise and development, which means that we both have me as learning expert, look into the quality and the way we train and so on. Company 3 has an internal corporate university divided in six academies, each of them covering different subjects. Among the subjects covered the portfolio of trainings includes Business Administration, taking care of common themes such as culture and change, Sales and Marketing, Purchasing, IT and Technology Operations. Training offerings are provided through both internal organization's members and external providers. When it comes to internal members, the company ensures they have all the necessary skills to deliver learning through extra courses, so that they can become tutors for their peers. Among the tutors there are instructor designers which develop training offerings, that in many cases are both virtual and face-to-face. The corporate university offerings are meant to be exploited during working hours, nevertheless the presence of multiple digital solutions for learning make possible for employees to take part to the programs whenever they want, even outside of the working hours timeframe. When the courses do not imply daily situations and company related matters, Company 3 prefers to buy the courses from external providers instead of providing it itself (e.g. Excel courses or Language Courses). On a macro perspective the company is currently dealing with a self-directed way of learning through multiple ways, such as On-the-Job trainings, Network training, Case Studies and Mentoring Programs. Despite that, the objective of the company is to reach by 2030 a purpose driven way of learning. To keep track of the LMS, Learning Channels and Learning Methods to focus the most on, adds Respondent E, the company is adopting the L&D Innovation Bulls Eye Model by CEB (Gartner) model, which reflects the company's direction for training. Another adopted model is the 70/20/10 Model, focusing on the learner path from the introduction to training until the desired outcome for the company. Respondent E sustains that whenever they secure learning, they have clear learning objectives in their trainees. During the training the tutors can secure that they are delivering the right kind of training and check if participants are learning on the way. Besides that they can do knowledge tests and different kinds of evaluations to ensure that the company can take the next step in changing employees' behavior, in some case in fact they follow up to check if the behavior is in place. The type of assessment depends also on the strategic importance of the different kinds of training programs the company delivers. One model the company is using, adds Respondent E, is the Kirkpatrick's four levels of evaluation and going into detail, the trainers look at the outcome the company is expecting to reach through the program in the development phase, and therefore identify Key Performance Indexes (KPI) that if in place can benefit the whole organization. According to the interviewee, assessing the acquisition of soft skills is not so difficult, since being on a long term scale, a supervisor can easily perceive if the trainee changed

his mind set and attitude. For this kind of evaluations, also interviews are used, where individuals' new skills are assessed through multiple perspectives such as his own view, his peers and subordinates. Another considered KPI, adds the respondent, can be the trainee's career progress. For this reason, when they see these indicators taking place, then the company can feel relieved that the investment they have done in these programs was a success. According to Respondent E, the pandemic affected the company on different aspects. While companies were shut during the beginning of the pandemic governments offered them to do competence development, to do so a program called competence boost was launched within the corporate university. The company also add some difficulties in the beginning to turn tutors into virtual instructors, since they suddenly had to operate in a different environment, this in order to ensure that quality will be maintained anyway. However, continued the respondent, switching to a virtual learning environment brought also benefits, such as the possibility of connecting people and tutors from the many countries the company is operating into. Nevertheless this transition was supposed to take place in a couple years and not a couple months, therefore the pandemic accelerated the transition. Despite it had been scary for the company in the first place, said the interviewee, the company responded well to the necessity thanks to its skilled IT team that managed to develop a well working infrastructure in a limited amount of time. Different trends are taking place according to Respondent E, among these, more importance should be given to the transition to modern learning. Modern learning does not see people as sponges for knowledge and the tutors as the only active parts, it is basically the opposite. In modern learning in fact the learner is the active part constantly chasing new knowledge in order to construct their experiences instead of being recipients of already made solutions. Another trend is that online training will continue with new delivery methods, such as podcasts for example, but the face-to-face dimension will not be forgot since for some types of knowledge active interaction is crucial to the success of the programs. Therefore a mix of delivery methods will take place in the future and also training is going to become more adaptive and flexible while individuals will need to become more curious and more proactive towards learning.

[Interview 6 \[Company 4\]](#)

Respondent F works as a Line Manager for an organization within his company called learning service delivery. Learning Service is the mother organization which caters for all trainings aimed for customers. These trainings are meant to take place in case of the purchase of either a product or a service or a network and delivered by the respondent's organization. The niche of his team is within interactive learning, therefore they do not do instructor-led training but rather eLearning, videos, webcasts, blended training flows and such. When It comes to employees' training, company 4 started with a LMS where it stores all the courses and has an handle on class

registrations and so on, even for instructor-led training. Within the system every product area has its own share-point site, which is an internal page in which every product has different associated trainings. Nevertheless in the last year the company adopted a platform called Degreed, an upscaling and learning experience digital platform. The platform consists in a webpage that makes all the trainings within the company available to everybody in the organization. Each member in the organization has a personal page where you can follow other people, just like in a social media, subscribe to trainings and get suggestions on the next steps his career. For example, if you are a Project Manager, the platform will suggest which courses your peers in the same position are taking. At the moment the platform is doing well, given that in terms of numbers almost the 90% of the company is using it. Even Talent Management is connected to the platform, in fact, based on your profile and the courses that you have taken, through the platform the company signals and offers to employees new career opportunities. In other cases they can be searching for somebody in the organization with specific qualification and get back to employees when matching the criteria. The company is currently encouraging employees to take charge of their own competence development. This connects to another feature of Degreed, its score system. Degreed indeed has this mechanism giving employees points whenever they complete a course, they share their outcomes, share articles and so on. In doing this the platform relies also on external platforms, so that the system will register also activities on other websites. The objective for the platform is to follow the employee through his entire career, since you can transfer your profile also to another employer. However, not all the L&D activities are left to employees, in fact when it comes to compliance learning, the company is somehow forced to push individuals, given that it needs to meet regulatory objectives. Respondent F is also convinced that a lot of pressure is coming from governments and the European Union, since in the fight against unemployment they are pushing a lot on continuous education initiatives. As stated by Respondent F, when it comes to assessing through the learning experience platform, in the presence of specific courses or programs, participation and completion are the main criteria to keep into consideration. When evaluating, Kirkpatrick level one and two are used, furthermore, course usage can be valuable also to indicate which skills are more requested and pursued, but also which can be the ones that the company might require in the future. Furthermore, to measure learning, participation and completion are not enough to establish if the learner actually acquired the knowledge or just went through the course with no outcomes or interest. Therefore, besides the previously mentioned indicators, follow-up structured interviews are conducted with people that completed the training to see if they really possess the comprehensive knowledge. They assess this through quizzes after the course takes place, sometimes it is embedded in the course, and it's not a positive approach according to the respondent. For what it concerns soft skills, of course it is not to assess the effectiveness of the

programs, but given that the program is for approximately 7400 managers a week, it is possible to assess it by comparing them. One way the company uses is a survey called “the voice”, that is conducted each quarter. During the survey employees are asked different topics such as how good they perform in their team when it comes to innovation, team spirit and so on. In case the company spots a low number in one of those areas and they launched a related training intervention, then it will force all managers to take it and check then in the next survey if the gap has been filled. Direct examples of the impact of the pandemic can be identified in many fields. Respondent F said that he was attending a course that formerly was supposed to be long three hours per day for five days, instead the company had to shorten it because of the impossibility to meet face to face. Furthermore, the learning uptake was negatively affected since they were not able to meet face-to-face. Furthermore, the respondent is convinced that the pandemic accelerated trends and therefore the transition towards a digital learning environment. Even though this transition was planned already, the pandemic forced the change, furthermore, some former managers were already warning the company around a decade ago that change towards digitalization would have become inevitable, but they were not listened until today. Back to the learning outcomes, the respondent is really critic, since he defined as not efficient spending several hours in front of a screen, this results in being not stimulating and thus engaging. Nevertheless, the pandemic also had positive impacts. Through digital learning indeed, costs barriers are overcome, since there is no need to travel anymore, keeping in consideration all the expenses of the case. Furthermore, trainers of a certain age might find it difficult to travel around and spending several days or weeks far from home and their families, therefore digital learning represent an effective solution for them. Not to underestimate, also the environmental impact caused by travelling is reduced or eventually eliminated thanks to online learning. When asked what are the future trends for L&D, Respondent F expressed that we might move into a direction where learning is available when it is needed, therefore not relying too much on people’s memory. In a traditional scenario the knowledge would be acquired at a space in time where it might not needed, or in some cases way before the actual exploitation of the knowledge. In the future instead, knowledge is going to be “on-the-spot” when needed. In the future Performance Support tools, which are meant to help employees with an on-the-job support at the moment of need, are going to be widely adopted by companies and introduced in the application itself. One example can be, after the download of a new app, the series of tutorials that appear at the first usage, helping the user to become familiar with the software as soon as he utilizes it. Furthermore, the knowledge will be limited only to the requirements, therefore not starting from the very basic theory. Another trend is connected to the introduction of new technologies in the learning processes, for example AI. The idea is to have either a personal assistant that, as mentioned before, can provide you with knowledge just-in-time

just like Google when searching for an information, or in terms of the advising which courses to take based on the previously attended ones or the learner's interests. In conclusion also the format of knowledge acquisition will be moving towards a more bite-sized learning approach.

Interview 7 [Company 5]

Respondent G works in Talent Management and Organizational Development Management. Going into detail, she is supervising a team focused on both of the previously mentioned aspects. The goal of the team is to deliver the best learning experience possible to the employee. Furthermore, the team is in charge of all the cycle of talent development, from talent acquisition to dismissal. For what it concerns the company development, it works in partnership with the management to facilitate the evolution of many aspects, among which the cultural dimension of the company. When asked which were the methods through which Company 5 is delivering training and long-term development, Respondent G said that in 2018 there was a huge turning point for the company: the launch of the corporate university. Through the corporate university the company wanted to make clear its vision as a Learning Organization, by working on employees' distinctive capabilities to maintain a competitive position in the market. To deliver this, the company is focusing a lot on digitalization that has not to be seen as a fancy solution but rather as a flexible way to work on internal skills and to be attractive to new candidates and current employees. The corporate university works on its group identity through customized digital learning, in particular semi-interactive digital courses are offered linked to the technical professional development to soft skills. For example, a researcher should be always updated on how to use machines, lab instruments and innovation processes, but everyone should take part to courses such as the "managing your time" program, in which employees are tutored on how to deal with time management efficiently. Most digital courses are developed internally and customized but the corporate university uses also "on-the-shelf" ones, in particular buying them from external providers, first evaluating the fit with the company's culture. To empower organizational efficiency, the company wants to align all teams, that are now preferred to the "top-players". The company, added respondent G, is trying to digitalize also onboarding through a coaching for the hiring team, having in mind that their decision in introducing a new resource are going to impact also the top-management. Another feature of the corporate university is an open license for LinkedIn Learning, in this way employees are offered with a wide range of learning opportunities outside of the standard offerings the company has. Another used platform is Franklin Covey, less formal in terms of learning procedures, but with high quality contents. The company is focusing on motivating employees to have discipline in the research for self-learning since, as a declared Learning organization, company 5 is aiming to provide lifelong learning opportunities to program participants. For this reason the company is expecting employees to be able to exploit these offerings. The first thing assessed from company 5, said Respondent G, are the utilized learning platforms before their launch. What they want to be sure of is that they are providing high quality content, they are fully accessible and user-friendly. When it comes to the trainees side,

having a digital learning environment allows the company to track the progress of each individuals through analytics made of data collected from the users' participation to the programs. Completion of programs represent an important index but it is not the only one, in fact, competencies are also assessed to the team contribution the trainee gives. If the business units suddenly starts to perform better, then it might be that the program was successful. The company wants to get also individual feedbacks, therefore asking individuals which are their impressions on the followed program but also if they felt any improvement with respect to their skills. The pandemic did not affect dramatically the company's offering for training and development. The reason behind that is that the company has been working since the day of the launch of the corporate university on a fully digitalized learning environment. Having the possibility to take part to programs anywhere at any time is a great step towards continuous education and self-professional development. Having a fully digital environment, added Respondent G, has also a considerable positive impact on use of resources, in fact there would be no need for classrooms devoted only to training, there would not be the need to pay for external tutors travel expenses and furthermore participants from different countries and locations can take part to the trainings they think might be useful the most for them with no geographical boundary. According to Respondent G, digitalization will become the core of future learning and companies should invest in it due to the many advantages it brings, in terms of costs and accessibility. Furthermore, the type of training will differ from the traditional way of learning, meaning that we are moving to more Bite-Sized learning solutions, transmitted from companies on a daily basis rather than single heavy courses to attend in a constrained timeframe. Finally, a more customized learning approach is being pursued in order to ensure that employees are always aware and up-to-date on the resources they are lacking of. Concluding, respondent G said that we are moving towards a moment in which competencies will need to be constantly updated to be able to maintain competitiveness on a long-term basis since the competencies we have today might not be useful anymore tomorrow.

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