A Critical Evaluation of the Contribution of Digital Learning in Small and Medium Sized Enterprises in Europe: A Literature Review

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Abstract

Small and medium-sized enterprises (SMEs) are critical to European economies through their significant and continuous contribution to employment and GDP growth. In 2018, SMEs represented 99.9% of an estimated 19.3 million enterprises in the EU and provided around 65 million jobs representing two-thirds of all employment. The literature suggests that digital learning is a good match for SMEs' learning requirements. It is informal, flexible and easily-accessible, and compared to face-to-face provision, it saves time and travelling expenses (for employees to go to the training providers). Above all, recent studies show that e-learning, if done well, is as effective as face-to-face learning, if not better. However, the literature also suggests that there are still many challenges for the adoption of digital training by European SMEs. These include a general lack of company learning strategy and a lack of awareness of opportunities offered by online training among both employers and employees. Moreover, technology and attitudes of owner/managers and employees seem to form potential drawbacks to digital learning initiatives in SMEs. This paper reviews the literature relating to digital learning in European SMEs. While noting its scarcity (particularly when compared to research about digital learning in larger enterprises), it critically evaluates the existing literature to determine the potential role of digital learning in small organisations. It argues that current digital learning provision is narrowly focused on job-specific training. This, with the help of new national and EU strategies, should change to a more holistic lifelong learning process that values the employees' lifeworld.

Keywords: *Digital learning, adult education, SMEs, workers' training and education, Europe*

1. Introduction

In Europe, small and medium-sized enterprises (SMEs) make up over 99% of all private enterprise and, thereby, this sector is very important for employment and economic growth [1], [2], [3]. Consequently, training and learning are considered critical to the growth of SMEs [4], [5]. Lifelong learning and continuous employee development, however, do not feature highly in the business plans of most SMEs. Compared to larger organisations, they offer less opportunities, mainly because they cannot spare time for employees to attend external training programs and because internal tailor-made educational and training programmes are too expensive for the enterprises.

Given the economies of scale, many SMEs are turning to digital learning to provide educational and training experiences. This paper presents a systematic review of the available literature in the area, which, despite the increasing use of e-learning by SMEs, is still scant.

2. The learning needs of SMEs

The literature identifies three main learning needs, and thereby, possible motivations, for education in SMEs. Firstly, from the literature with an L&D perspective emerges the need for learning intended for the growth of the enterprise. Secondly, the need for owners-managers and employees to keep their skills and knowledge updated with the intention of remaining competitive in the local and international market is identified. Thirdly, from the literature in adult education, active aging, eco and social justice, emerges the need for both owners and employees to become critically aware of their social reality – to read the world, not only the word.

However, SMEs, particularly micro-enterprises, that is, those which employ 10 or less employees, typically have limited financial and human resources. Microenterprises make up around 90% of SMEs and employ one-third of the workers in private businesses. They, however, are likely to operate in a less certain business environment [6] (compared to larger organisations) and, thereby, are particularly aware of costs – including expenses for educational and training programmes [7]. This, together with their often-limited expertise in training and research, limits their L&D provision.

Globalization and the concomitant increased internationalization of markets and economies have increased competitive pressures on SMEs. The EU and OECD are aware of this predicament and have urged governments to help SMEs to train their personnel. This has led most European governments to help educational institutions to create, develop and provide – often with minimal or no cost - learning programmes for SMEs. This notwithstanding, few SME owners, managers and employees avail themselves of these educational opportunities, citing many reasons including the challenge to be released from their job, family and social commitments. SME owners also claim that, through training, they are fearful of losing the then better-trained employees through poaching or mobility to larger and/or better-paying companies, and the unavailability of appropriate courses that answer their specific needs [8], [9]. Research also indicates that this can also happen due to the lack of knowledge of such initiatives, as well as their formal nature which is not congruent with the informality and spontaneity of SMEs. Indeed, the research suggests that both communication and learning within SMEs tends to be relaxed and personalised, often with some resistance to formal, standardised methods and techniques. Moreover, learning of new skills and attitudes, particularly by new employees, typically occurs through on-the-job informal from an experienced employee and/or manager [10] and 'accidental learning' experiences.

3. Digital Learning in SMEs

Digital learning has received criticism regarding its ability to provide real value for learners, particularly because of its lack of social and teaching presence. For years, comparisons between the quality of learning in the classroom and digital learning (also referred to as "e-learning", "computer-based learning" or "web-based learning") were made with varied and often vague arguments [11]. Apparently, much of this criticism emerged because digital learning at its early age was far too technology-focused with a lack of focus on the learners, their real needs and aspirations, and the learning outcomes. Today, digital learning is generally considered to be able to provide at least similar and many times even better outcomes than classroom training when designed properly [12], [13], [14], [15].

This review identified a number of opportunities and challenges of digital web-based learning for SMEs.

3.1 Opportunities

Roy [16] argues that digital learning is a good match for SMEs' learning requirements. It is informal, flexible and easily-accessible, and compared to face-to-face provision, it saves time and travelling expenses (for employees to go to the training providers) [17]. It also allows learning to take place at a pace suited to the needs of the learners [18]. Above all, it is closer to the less-structured experiential learning approach that is preferred by SME owners and employees.

Vancell and Patala [19] identify other benefits that can achieved through distance learning. These include:

- Time-efficiency: reductions in time used for administrating and studying courses frees up resources for other tasks and saves money.
- Employee engagement: better employee engagement decreases staff turnover and generates substantial cost-savings when less employees leave the company. Engagement has very positive impact on productivity as well.
- Productivity: carefully targeted training to all employees with continuous learning opportunities increases productivity substantially
- Staff retention: acquiring and maintaining skilled workforce is increasingly difficult in today's highly competitive labour market. The most efficient way to keep retention rates high is by providing on-going training opportunities for staff.
- Cost-efficiency: digital learning can bring massive cost-savings, but they realize to the company's benefit only when training is carefully targeted and high in quality. A comprehensive digital learning strategy and application of learning design principles in course development can help SMEs achieve scale benefits.

3.2 Challenges

Notwithstanding the advantages mentioned above, the literature points to a limited (yet, increasing) uptake of distance digital learning. Various challenges has been identified. One major drawback is the

technology infrastructure that exists in many SMEs. Although huge progress has been made in digital and communication technologies, SMEs often possess inadequate infrastructures for successful learning experiences. Another barrier is the learners' lack of digital skills and their limited awareness of available digital learning programmes [20]. Moreover, many owners and workers, despite the 'informal learning culture' that exists in SMEs, still consider learning to be the acquisition of knowledge through delivery approaches in traditional settings such as classrooms are thereby fearful of unknown pedagogies and learning dimensions.

Other barriers mentioned in the literature include: false expectations (for example, workers believing that an online learning programme requires less time and effort to follow than its face-to-face equivalent), the lower level of physical interaction between learners, the cost of purchases of e-courses or the cost of in-house development [21].

4. Discussion and Conclusion

This paper reports on the review of available literature with the intent of identifying the opportunities and barriers of digital learning for SMEs. Although in recent years, digital learning, particularly that provided through online networks, has been growing into an accepted educational reality for SMEs, for it to become a more viable and feasible solution, more research is required. The limited educational research however suggests that more effort is required to eliminate or at least alleviate some of the barriers SMEs run into while using digital technologies for earning.

Indeed, a number of actions could facilitate the adoption of digital learning by SMEs and address the barriers they face. This includes the need to develop a learning culture within the SMEs where owner-manages and workers are truly committed and motivated to a holistic lifelong learning process as well as alternative methods of training, particularly distance e-learning which is more congruent to the informal culture of these enterprises. This obviously can only be achieved through an increased awareness of the importance of learning, and the advantages of distance learning especially for the employee who is also committed to familial and social duties.

SMEs should be helped by the EU and national governments, to eliminate or, at least reduce, the obstacles that work against the efficient and effective use of digital learning, including inadequate infrastructure, technological problems and lack of support services. These enterprises should also be helped in improving many owners' and employees' lack of necessary ICT skills, as well as their scant knowledge of the available digital learning programmes, which, the literature contends, act against the more widespread use of digital learning in European SMEs.

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