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Master in Business Administration

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"Upskilling and Reskilling - Integrating Lifelong Learning in Strategic Human Resource Management: The Case of Greece"

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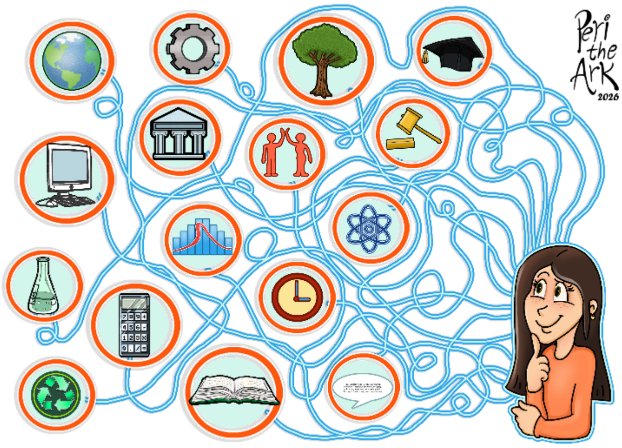

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“Upskilling and Reskilling - Integrating Lifelong Learning in Strategic Human Resource Management: The Case of Greece”

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Patras, Greece, May 2026

Dedicated to the people in my life that have supported, inspired and motivated me to always strive for the best
-my parents, Anna and Spyros,
my husband, Periklis, and our wonderful son, Harry.

Abstract

This thesis examines the strategic integration of upskilling and reskilling initiatives within the contemporary Greek corporate sector through the lens of Strategic Human Resource Management (SHRM) and the Resource-Based View (RBV). Using the VRIO (Value, Rarity, Inimitability, Organization) analytical framework, the study evaluates how technological adaptability and entrepreneurial agility can be transformed into sustained competitive advantages in the Greek economic reality dominated by Small and Medium-sized Enterprises (SMEs). Utilizing a secondary data synthesis, the research analyses macroeconomic indicators, national strategic plans, and institutional reports from organisations such as the Public Employment Service (DYPA) and the OECD. The empirical data reveal a critical "strategic implementation gap" and a persistent skills mismatch. Despite unprecedented financial inflows from the European Recovery and Resilience Facility (RRF), Greek businesses frequently treat training as a short-term operational expense and fail to see the long-term strategic investment in it. This attitude combined with the informal and reactive nature of Greek SMEs, prevents organisations from satisfying the "Organisation" dimension of the VRIO framework. As a result, advanced digital skills training yields only temporary advantages. The thesis concludes that bridging the digital divide requires an alignment where state-sponsored training policies integrate with Greek businesses' SHRM frameworks. Managers must shift toward proactive skill-mapping and experiential learning models to embed knowledge within organisational routines, thereby ensuring long-term competitive resilience.

Keywords

Strategic HRM, VRIO Framework, Resource-Based View, Reskilling, Upskilling, Lifelong Learning, Skills Mismatch, Digital Divide.

Περίληψη

Η παρούσα διπλωματική εργασία εξετάζει τη στρατηγική ενσωμάτωση των πρωτοβουλιών με σκοπό την αναβάθμιση δεξιοτήτων (upskilling) και την επανειδίκευση (reskilling) στο σύγχρονο ελληνικό εταιρικό περιβάλλον, ιδωμένη υπό το πρίσμα της Στρατηγικής Διοίκησης Ανθρωπίνων Πόρων (SHRM) και της Θεωρίας των Ενδοεπιχειρησιακών Πόρων (RBV). Χρησιμοποιώντας το αναλυτικό πλαίσιο VRIO (Value, Rarity, Inimitability, Organisation), η μελέτη αξιολογεί πώς η τεχνολογική προσαρμοστικότητα και η επιχειρηματική ευελιξία μπορούν να μετατραπούν σε διατηρήσιμο ανταγωνιστικό πλεονέκτημα, εντός ενός οικονομικού οικοσυστήματος που κυριαρχείται από Μικρομεσαίες Επιχειρήσεις (ΜμΕ). Μέσω της σύνθεσης δευτερογενών δεδομένων, η έρευνα αναλύει μακροοικονομικούς δείκτες, εθνικά στρατηγικά σχέδια και εκθέσεις οργανισμών όπως η Δημόσια Υπηρεσία Απασχόλησης (ΔΥΠΑ) και ο ΟΟΣΑ. Τα εμπειρικά δεδομένα αποκαλύπτουν την ύπαρξη ενός κρίσιμου «στρατηγικού κενού υλοποίησης» και επίμονη αναντιστοιχία δεξιοτήτων (skills mismatch). Παρά τις πρωτοφανείς χρηματοδοτικές εισροές από το Ταμείο Ανάκαμψης και Ανθεκτικότητας (RRF), οι εγχώριες επιχειρήσεις αντιμετωπίζουν την κατάρτιση ως βραχυπρόθεσμο λειτουργικό έξοδο παρά ως μακροπρόθεσμη στρατηγική επένδυση. Αυτή τους η στάση, σε συνδυασμό με τον χαρακτήρα των ελληνικών ΜμΕ να μην τυποποιούνται και να λειτουργούν αποσπασματικά και εκ των υστέρων, εμποδίζει τους οργανισμούς να ικανοποιήσουν τη διάσταση της «Οργάνωσης» (Organisation) στο πλαίσιο VRIO. Ως εκ τούτου, η ειδίκευση σε προηγμένες ψηφιακές δεξιότητες αποφέρει μόνο προσωρινά πλεονεκτήματα. Η εργασία καταλήγει στο συμπέρασμα ότι η γεφύρωση του ψηφιακού χάσματος απαιτεί μια συντονισμένη προσπάθεια, όπου οι κρατικές πολιτικές κατάρτισης θα ευθυγραμμίζονται απρόσκοπτα με τα εταιρικά πλαίσια SHRM. Τα διοικητικά στελέχη οφείλουν να στραφούν προς τη δυναμική χαρτογράφηση δεξιοτήτων και τα βιωματικά μοντέλα μάθησης, ώστε να ενσωματώσουν τη γνώση στην επαγγελματική τους ρουτίνα, και έτσι να εξασφαλίσουν μακροπρόθεσμη ανταγωνιστική ανθεκτικότητα.

Λέξεις – Κλειδιά

Στρατηγική Διοίκηση Ανθρωπίνων Πόρων, Πλαίσιο VRIO, Θεωρία Ενδοεπιχειρησιακών Πόρων, Επανειδίκευση, Αναβάθμιση Δεξιοτήτων, Διά βίου μάθηση, Αναντιστοιχία Δεξιοτήτων, Ψηφιακό Χάσμα.

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List of Abbreviations & Acronyms

DG REFORM: Directorate-General for Structural Reform Support

DYPA: Public Employment Service

EU: European Union

GSEE: General Confederation of Greek Workers

HR: Human Resources

HRM: Human Resource Management

ICT: Information and Communications Technology

INE-GSEE: Labour Institute of the General Confederation of Greek Workers

LAEK: Employment and Vocational Training Fund

OECD: Organisation for Economic Co-operation and Development

RBV: Resource-Based View

RRF: Recovery and Resilience Facility

SEV: Hellenic Federation of Enterprises

SHRM: Strategic Human Resource Management

SMEs: Small and Medium-sized Enterprises

VRIO: Value, Rarity, Inimitability, Organization

1. Introduction

1.1 Background of the Research

In a fast-changing world, the aspect of work is rapidly changing as well. Taking into consideration the advancements of technology, AI in particular, post-pandemic shifts in work conditions and demands, globalisation, the green transition, as well as the "silver tsunami", meaning the ageing population, it is evident that the labour market's needs are different than what they used to be some decades ago, and so are the skills required for the currently available types of jobs (OECD, 2022; European Commission, 2019). The immerging question is to which extent these changes will prove beneficial to employers, employees and economies; this depends mostly on the learning systems providing lifelong learning that allows a person's skillset to stay current throughout their career or help them start over their career in a more promising field of work (OECD, 2022). Labour markets and training policy leaders worldwide, thus, face a great challenge as the parameters of organisational competitiveness have changed in this unstable environment. Traditional corporate assets are rapidly depreciating, forcing entreprises to find ways to secure sustainable growth. Therefore, they need to balance a shortage in skills and also provide a solution for the existing skill gap (BusinessEurope, 2023; OECD, 2024, 2025). This mismatch is generally considered as the fact that the labour market demands a different skillset than that available or supplied by employees. In reality, it is a more complicated matter since a number of difficulties may be leading to this mismatch: employees may be under- or over-qualified; employers may face an overall lack of people with the desired skills or fail themselves to attract personnel that have the appropriate skills; people may have skills that have currently become obsolete (McGuinness et al., 2017). In this economic environment, Strategic Human Resource Management (SHRM) has emerged as a critical organisational bridge, that through continuous workforce development, specifically upskilling and reskilling initiatives designs to cultivate adaptability.

1.2 Problem Statement

SHRM literature considers it a given that organisations possess the structural maturity and financial liquidity to execute proactive training models. Empirical reality, nonetheless, is very different for Greece. In Greece, the corporate landscape is overwhelmingly dominated by Small and Medium-sized Enterprises (SMEs), which historically manifest reactive, informal, and fragmented human resource techniques (Psychogios et al., 2016). Despite substantial financial funding from the European Recovery and Resilience Facility (RRF) managed by state networks such as the Public Employment Service (DYPA), the Greek labour market suffers from a persistent, structural skills mismatch and a severe digital divide (SEV, 2024).

It is not uncommon for Greek businesses to fail to realise that skills enhancement provides a capital investment (Myloni et al., 2023), thus, resulting in a "strategic implementation gap." Hence, the following paradox is created: while macroeconomic policies flood the ecosystem with funding, micro-level corporate mechanisms fail to strategically absorb these resources to build sustainable organisational intellect. To bypass these organizational friction points, European policy frameworks increasingly promote demand-driven, person-centered tools, most notably Individual Learning Accounts (ILAs), which aim to shift training initiative directly to the individual worker (Cedefop, 2020). However, the strategic integration of such mechanisms within the rigid environment of Greek firms remains to be examined.

1.3 Research Objectives

To address this paradox, this thesis examines the strategic integration of upskilling and reskilling initiatives within the Greek corporate sector through the lens of strategic human resource management and modern European practices. Specifically, the study is guided by four core research objectives:

1. To evaluate the structural and cultural barriers that inhibit Greek entreprises, particularly SMEs, from transitioning from traditional personnel administration to strategic human resource management.

2. To analyse the efficacy of state-sponsored upskilling and reskilling initiatives (such as those managed by DYPA) and identify the root causes behind the persistent skills mismatch in Greece.
3. To apply strategic HRM frameworks to digital competencies and upskilling, showcasing the specific organisational obstacles that prevent training resources from turning into long-term competitive advantages.
4. To evaluate the strategic utility of Individual Learning Accounts (ILAs) as an alternative policy to overcome the internal HR limitations of Greek SMEs.

1.4 Structure of the Thesis

To achieve these objectives, the thesis is organised into six chapters. The current chapter, Chapter 1, is the introductory chapter and then follows Chapter 2 where the theoretical foundation is established, critically reviewing literature on SHRM and the RBV framework. Chapter 3 outlines the secondary data synthesis methodology applied to evaluate the Greek market. Chapter 4 maps the structural characteristics of Greek SMEs, the digital divide, and current institutional training frameworks. Chapter 5 presents the strategic analysis, applying the VRIO framework to the gathered data and developing an analysis of Individual Learning Accounts (ILAs) as a strategic tool to overcome SME organizational barriers. Finally, Chapter 6 synthesizes the final outcomes, presenting Strategic SHRM Recommendations for Greek entreprises and policy makers, Managerial Implications for HR professionals, and the study’s Limitations and Future Research directions.

2. Conceptual and Theoretical Framework

2.1 Conceptual Definitions

2.1.1 Lifelong Learning

The OECD in 2021 defined lifelong learning as an inclusive term of the development and acquisition of every kind of skill and knowledge that a person gains over the course of their life. In this sense, it forms a general approach to the meaning of lifelong learning since it can derive from different kinds of settings, both intentional and unintentional, formal and non-formal; training centres, workplace trainers, colleagues or even unplanned social interactions (OECD, 2021). More recently, the OECD does not redefine but rather expands the already general term in an attempt to respond to the imperatives of the 21st century. Lifelong learning is, thus, described as a dynamic, agile and universal system, whose role is to secure people against sudden technological and social changes (OECD, 2025). In the same report, it is apparent that the concept of lifelong learning is not merely a choice, but rather a necessity, in order to overcome work inequalities. It is considered a “targeted investment”, data-driven and agile, that can promote growth in a sustainable way and limit constraints. Moreover, the trainee is at the centre of this type of learning, therefore because of the need for agility in the system, they are the one with control over the style, the medium and the subject of the training. As of 2025, in full alignment to European directives, lifelong learning is currently defined as a process supported by *micro-credentials*, that is small, targeted learning packages that allow for the constant updating of skills (Council of the European Union, 2022). So, while in 2021 OECD emphasized the biological and institutional aspect of learning from childhood to pension, in 2025 shifts the definition towards learning systems (agile governance), focusing on agility, accessibility, and based on data deriving from the labour market itself, not just theoretical approaches, in order to comply with the demands of a fast-changing society.

2.1.2 Upskilling and Reskilling

Both upskilling and reskilling are essential in modern economy as they offer the opportunity for the employee to either gain a completely new set of skills (reskilling) or enhance the skills they already have in order to be able to stay relevant to what is required by their current job (upskilling) (Acut et al., 2026). Reskilling is considered to be the acquisition of new abilities in order to be eligible for new positions, and is frequently a necessity due to job functions becoming obsolete because of automation (Hötte et al., 2023), thus allowing them to transition to new roles in expanding sectors, e.g. green, digital economy (Council of the European Union, 2022). On the contrary, upskilling builds on the skills the employee already possesses with regard to the improvement of their performance within the role they currently have in the workplace (Acut et al., 2026), meaning growth within their present occupation (Modestino et al., 2015).

2.1.3 Employability and Employment

Employability is a person's capacity to gain and maintain employment by consistently developing and enhancing their skills to remain relevant and attractive to the job market. As Barachino et al. (2025) note, this type of definition of employability, though generally valid, cannot apply in the same way universally, since regional labour market demands and skills requirements among industries vary. Barachino et al. (2025) also highlight the observation that higher education lately has been expanded and standardised which has resulted in high competition in the labour market due to the plethora of university degree holders, therefore creating the added need for skills and credentials, other than academic ones, in order to distinguish oneself in today's antagonistic market. European Commission, on the other hand, directly links employability to having "key competences", meaning a dynamic combination of *knowledge, skills* and *attitudes*, that can be cultivated during lifelong education and are deemed necessary for employability (European Commission, 2019). In this sense, there is straight correlation with having soft skills, a set of abilities characterized by versatility that can be beneficial in many different professional areas, the most prominent being communication skills, adaptability, problem solving, teamwork and critical thinking (World Bank, 2023).

Furthermore, since employability by definition is linked to employment, the observation has been made that in order to accurately define what it means to be employable today, one has to define the current meaning of employment. Given that the nature of employment changes rapidly and the fact that nowadays it is not limited to the established 8-hours-a-day/5-days-a-week office job, then employability is something different than what was traditionally considered as well (Eurofound, 2020). More precisely, a redefinition of the skills for employability is needed since the relationships between employees and employers have changed, work often is not provided on a regular-basis but is more project-based, the use of ICT has detached work from being done in specific premises and, as a result, the whole nature of patterns of work is different. Consequently, being digitally ready, autonomous, flexible and able to manage time efficiently are non-negotiable skills in today's market if one wishes to be regarded as employable. So, employability is more accurately defined as the ability to prevent skill obsolescence by continuously upskilling and reskilling. Therefore, lifelong learning tools, such as Individual Learning Accounts and Micro-credentials, are essential for an employee, because they can increase their professional flexibility and, thus, employability (Council of the European Union, 2022; OECD, 2025).

2.2 Strategic Human Resource Management

According to contemporary strategic human resource management (SHRM) frameworks, Strategic Human Resource Management (SHRM) is to highlight its connection to organisational performance (Myloni et al., 2023; Psychogios et al., 2016). According to this point of view, "Strategic human resource management is the process of linking the human resource function with the strategic objectives of the organization in order to improve performance." This process is not linear, but dynamic, demanding constantly adjusting HRM practices and policies to the firm's environment, meaning competition and business conditions. The business strategy needs to align with human resources using a system not "logical and sequential", but rather "complex and iterative."

Banazılı (2024), on the other hand, apart from organizational performance, emphasizes problem solving and employees' engagement, in their definition of Strategic HRM: "Strategic Human Resources Management (Strategic HRM) is the purpose-oriented solution of human resources administration and policy problems so as to enhance the effectiveness of public institutions and organisations." (Banazılı, 2024, p. 219). Moreover, it is stressed that the way employees perform is influenced by the recognition they receive for the importance of their role, and by the "commitment by employees, public officials, political leaders and supervisors to work together for change." (Banazılı, 2024, p. 219). The complexity of the system and the high demands on Strategic Human Resource Management are evident.

2.3 Resource-Based View

2.3.1 Introduction and Framework

Resource-Based View (RBV) can give a better, more scientific explanation as to the reason upskilling, reskilling and lifelong education add value to modern organisations. In strategic management, the Resource-Based View (RBV) is a helpful tool that looks at a company's internal resources. Its main goal is to find out where a company's competitive advantage comes from. Competitive advantage means the advantage or the upper hand that a company has over its rivals in the market. According to Hötte et al. (2023, p. 5), "Firms determine the optimal allocation of skills or technologies to tasks according to the prices of different inputs and the productivity of these inputs in specific tasks."

The RBV theory is based on two important ideas: resource heterogeneity and resource immobility. This means that different companies have different resources, and these resources cannot easily move from one company to another. According to how this theory evolved, if a company wants to have a long-term competitive advantage, it must own and use resources that pass the VRIN or VRIO test. In simple words, the company's resources need to be valuable, rare, difficult for competitors to copy (inimitable), and the company must be well-organized to use them properly (EBSCO, n.d.). This theory explains why VRIN/VRIO resources are of the essence for an organization in order to achieve sustainable competitive advantage (Mailani et al., 2024).

According to the VRIN analysis a firm's resources and capabilities were evaluated against four criteria: Valuable, Rare, Inimitable, and Non-substitutable. This model though, according to early critics, was quite static as it did not take into consideration the aspect of the Organisation, which is crucial for taking advantage of the resources (Antony & Anuradha, 2026). To address this gap, the previous model was reformed into VRIO (Valuable, Rare, Inimitable, and Organised). This shift highlights that even if a firm possesses valuable and rare assets, they cannot generate superior performance without the appropriate organisational structure, routines and administrative systems to support them.

2.3.2 RBV and Human Capital

According to RBV, an organization gains a competitive advantage when its resources are, as previously stated: Valuable, Rare, Inimitable, and Organised. In today's market, university degrees or generic skills are not uncommon and can be easily acquired by competitors. Yet, a company's human capital that continuously gets trained via upskilling or reskilling becomes a rare intangible resource.

There is strong interplay between RBV and SHRM. In order to understand how the value of HR is created and how it is retained within the organisation (value capture), taking into consideration complementarities is imperative; this means evaluating how good HR practices, such as lifelong learning, comply with company culture (Gerhart & Feng, 2021). This is also the basis for answering the question as to how to achieve said value capture and maximize the benefit for the organisation. This is the product of worker immobility. When employees build their skills (upskilling) according to the specific company culture and its own systems and procedures, imitation by competition becomes difficult. In this sense, lifelong learning is not just a training cost, but a strategic process of protecting one's resources, as it creates Firm-Specific Human Capital that wouldn't be of such value in any other organisation.

Therefore, the distinction between personnel with general skills and Firm-Specific Human Capital must be made since the latter results in reducing employees' mobility towards competitive firms and allows for the organisation to "lock in" and take advantage of the value of that knowledge and skillset (Gerhart & Feng, 2021).

2.4 Learning Organisation Theory

In order for modern organisations to adjust to changes, such as the increasing use of Artificial Intelligence (AI) and green/digital transformation, they need to adopt a learning-oriented approach, which means that learning should be incorporated by all parts of the company (Banazılı, 2024). Therefore, upskilling and reskilling is needed to play an important part in creating a culture of adaptability and continuous learning throughout the business, not be considered as just the attendance of seminars. This helps businesses hold on to talents and gain competitive advantage over competition.

According to this framework, a learning organisation is not just a firm performing seminars, but an organisation where people constantly hone their ability to create the results they truly desire.

In order for that to be achieved, the organisation needs to have five disciplines:

1. Personal Mastery (employees' personal improvement)
2. Mental Models (change as to the way things are considered to be)
3. Shared Vision (common expectations about the future of the business)
4. Team Learning (instead of solely learning as an individual)
5. Systems Thinking (the discipline that is the link between all other disciplines)

Upskilling and reskilling support the disciplines of Personal Mastery and Team Learning, as they provide the modern tools, such as digital competence, to both reach personal advancement and add to the firm's team mentality.

Nevertheless, employees' skills are quickly losing their value due to the rapid technological and economic changes, leading to skills' atrophy and skill obsolescence. Skill obsolescence is very common in high technology fields and may affect up to one third of employees during their careers (McGuinness et al., 2017).

This problem in skill gaps and underskilling can be solved with systematic provision of motives for learning within the company (firm-level training). When a firm functions as a learning organisation and addresses skill gaps internally, it reduces the need to constantly seek new hires. This way, both the human capital of the company is secure and labour market's shortages are covered (McGuinness et al., 2017).

2.5 Theory Synthesis

In conclusion, to fully understand the importance of upskilling and reskilling in Strategic HRM, a combination of the three theoretical frameworks will provide a clearer picture. Firstly, Human Capital Theory shows the economic aspect of the issue, as it helps understand that learning is an investment that reduces skill gaps, as International Labour

Office's report states (McGuinness et al., 2017). Then Resource-Based View takes it a step further as it depicts that this human capital is actually a strategic resource providing a competitive advantage to the firm against competition in the labour market, as long as the firm is organised in the right way by the managers so that the employees' skills are fully used (VRIO). Finally, the Learning Organisation theory is the main link to human resources, since it makes evident the fact that in order to avoid skill obsolescence due to technological advancements, the company itself needs to have constant-learning culture. Therefore, upskilling and reskilling are essential for the business to not only continue existing in a fast-changing economy, but they also provide with the basic elements for it to thrive.

3. Methodology

3.1 Research Design

The methodology adopted in this thesis is that of the Systematic Literature Review – SLR. The primary objective was to gather, evaluate and synthesize all available academic research linking upskilling and reskilling with Strategic HRM, focusing mainly on the case of Greece. More specifically, SLR was chosen because it is more reproducible due to it being systematic following specific criteria, thus the possibility of researcher bias is fairly limited compared to traditional literature reviews.

3.2 Search Strategy and Selection Criteria

In order to ensure the retrieval of relevant academic literature in an un-biased way, a two-step search strategy was developed and implemented. The primary literature search was conducted mainly in Google Scholar and EBSCOhost, that are recognized as repositories for management, economics, and social sciences research.

For the electronic database search, specific keywords were used that aligned with the core research questions of this thesis ("upskilling", "reskilling", "lifelong learning", "Strategic HRM", "Strategic Human Resource Management" and "Greece", "Greek"). To widen the scope of the theoretical framework so as to include international best practices that could possibly apply to the Greek ecosystem as well, a secondary search was executed without geographical specification.

In addition to the direct database searches, a "backward snowballing" strategy (also known as citation tracking) was applied. This involved manually screening the reference lists of the core articles that had previously been reviewed. This method allowed for identifying theoretical papers and institutional reports from international organizations —such as the OECD, the World Bank, the International Labour Office (ILO), Cedefop and Eurofound— that did not appear in the initial keyword searches but are useful to better understand the current situation that this thesis attempts to delve into.

To refine the initial search results and select the most relevant studies, inclusion and exclusion criteria were established before the screening process. These criteria are depicted in the table below:

Criterion	**Inclusion Criteria**	**Exclusion Criteria**
Publication Type	Peer-reviewed journal articles, official reports from international organizations (e.g., OECD, World Bank, ILO, Eurofound).	Working papers, conference abstracts, book reviews, commercial blog posts, and non-peer-reviewed sources.
Time Period	Studies published between 2015 and 2026, to capture the most recent digital and strategic HRM trends.	Research published prior to 2015, unless considered a foundational theoretical framework.
Language	Articles written in English and Greek.	Studies published in any language other than English or Greek.

Theme Focus	Studies analyzing the strategic role of lifelong learning, upskilling/reskilling, human capital value creation or the macroeconomic labour market conditions in Greece.	Studies focusing exclusively on the training in a specific field, without any connection to strategic HRM or organizational performance.

Table 3.1 Inclusion and Exclusion Criteria for the Literature Review Selection

3.3 Screening and Selection Process

The search and refinement process followed a four-stage continuous screening format. In the initial stage (Identification), the systematic electronic database search combined with backward snowballing and citation tracking from core reference lists presented a preliminary pool of 65 academic papers, international policy guidelines and institutional documents. During the second stage (Screening), the titles and abstracts of these 65 sources were evaluated against the predetermined inclusion and exclusion criteria, so studies that focused on unrelated sectors, specific technical fields or studies that lacked a distinct strategic management perspective were excluded. In the third stage (Eligibility), the full texts of the remaining studies —including theoretical textbooks, peer-reviewed articles, and institutional reports from international bodies such as the OECD, the World Bank, Eurofound, ILO, and Cedefop —were reviewed and assessed. Finally, the selected remaining highly relevant studies were included in the synthesis. As a result, these final selections present methodological rigour, fall within the acceptable publication dates (2015-2026), and focus on the connection between lifelong learning, upskilling and Strategic HRM within modern economies, providing the necessary data, as well, to evaluate the contemporary Greek labour market state.

4. Lifelong Learning and Skills Development in Greece

4.1 Socioeconomic Challenges and Labour Market Mismatches in Greece

The contemporary Greek labour market has suffered three consecutive macroeconomic shocks that have contributed to the current situation. Firstly, the decade-long financial crisis of the years 2009–2018 triggered an unprecedented contraction of GDP, which resulted to unemployment reaching 27.5% in 2013 and caused a massive wave of qualified human capital flight known as "brain drain" (International Labour Organization [ILO], 2020). This period left Greek firms undercapitalized and lead to a severe suspension of long-term investments in training and development, that had a deep impact in the Greek economy and society. Just as the economy was stabilizing, the COVID-19 pandemic, abruptly forced the transition to remote work environments for which traditional corporate structures were not ready to provide. This showed that there is great deficit in basic digital literacy across the firms' structures (Eurofound, 2021). Today, under the enforcement of the European Union's digital and green transitions, Greece, having recently undergone the previous challenges, has to face a new challenge. This causes a "skills shock," meaning that existing professional competencies become obsolete quicker than the domestic education system can retrain the active workforce (Cedefop, 2022). According to Pisinas (2022a), analysis by the Centre of Planning and Economic Research (KEPE) emphasizes that the historical under-investment in workforce capabilities is what has mostly constrained the long-term transformation of the domestic economic model toward high-value, knowledge-intensive sectors.

The decade-long economic crisis in Greece, the setback of the COVID pandemic and the demands of digital and green transition have, therefore, led the contemporary Greek labour market to operate with a plethora of structural challenges. These imbalances are deeply embedded within the Greek economy. The issue that is more prevalent is the skills mismatch phenomenon. This means that the education system generates a supply of competencies that does not cover fully the evolving demands of modern firms. According to recent institutional assessments, skills mismatches and persistent skills shortages act as a bottleneck to sustainable economic growth. As a result, corporate productivity, employee wages and overall job satisfaction are reduced (OECD, 2026). One can get a clearer picture by comparing the current state in Europe as a whole and that of Greece: In the European context, data reveals that approximately 21% of workers are over-qualified for their current roles, while 25% report being over-skilled (OECD, 2026). This paradox, though, is much more visible in the Greek labour market. While the nation has a generation of young professionals with advanced university degrees, it simultaneously experiences staggering levels of youth unemployment and chronic qualification inflation (Cedefop, 2020; ELSTAT, 2025). These rates are among the highest in the European Union. Domestic enterprises and HR departments have failed to manage this gap, so under-utilisation of human capital and rapid skill obsolescence in Greece are common.

Given that the European strategic objectives dictate Greece's national policy to a great extent, it is imperative that those should be taken into consideration in the approach of this matter. According to the European Pillar of Social Rights Action Plan, European member states have set ambitious targets for the year 2030, committing that at least 60% of all adults should participate in training and continuous education yearly (European Commission, 2021), a percentage that is a challenge to be achieved. This high percentage is an indicator that lifelong learning for the European Union is considered to be essential for the sustainment of market agility and not simply an initiative towards general educational welfare, thus elevating it to the significance of a core pillar for the economy in an attempt to face the rapid changes in the labour market. On the part of Greece, it would require fundamental restructuring of Human Resource Management within the firms as well as crucial intervention from the public sector, for the country to be able to achieve having 60% of the adult population trained.

As the Hellenic Statistical Authority (ELSTAT, 2025) pinpoints, even though unemployment numbers are improving, the participation rate of Greek adults (25 to 64 years of age) in formal or non-formal lifelong learning systems is much lower than the EU average. While in the EU the average is approximately 11%, in Greece it's as low as 3.5 to 4%. The accumulation of this deficit in training is the main cause that workers' skills do not align with the current demands and needs of the Greek entreprises, that want to keep up with competition both in a domestic and international economic environment. So, upskilling must be considered as a prerequisite for every employee, as much as reskilling must be considered as an alternative for every unemployed person or even an employed one who feels they have reached the end of the career ladder in their field and are ready to explore other fields of work for better opportunities in order to grow professionally.

Other data from the Hellenic Federation of Enterprises (SEV, 2024) indicate that over 38% of manufacturing and technology firms in Greece report severe difficulties in filling job vacancies, despite the abundance of applicants. This is mostly due to the absence of contemporary digital literacy, technical capabilities and advanced soft skills amongst those who are in pursuit of a (new) job (OECD, 2026; SEV, 2024).

Taking the previous data into consideration, one can reach the conclusion that Strategic Human Resource Management in Greece needs to focus on skills-building rather that personnel management. As the Resource-Based View makes clear, it is essential that the organisation makes the necessary structural changes in order for the human capital to be able to yield sustained competitive advantage. In Greece, this is especially more difficult to be accomplished given that there is an absolute prevalence of small and medium-sized enterprises (SMEs), which constitute an overwhelming 99.9% of the domestic businesses. They also account for approximately 84.7% of total private sector employment in the country (European Commission, 2025b). Many of the SMEs are in fact micro-entreprises as well, that employ less than 10 people, which further complicates the situation, since these small firms often view training as a short-term operational cost rather than a strategic investment, that would improve performance and maximize gain in the long run. This internal operational logic shows a gap between global strategic theory and domestic execution. While mainstream Strategic HRM literature emphasizes that corporate training must maintain a strict "strategic alignment" with long-term organizational objectives to improve firm performance (Banazılı, 2024), empirical evidence from Greece reveal that human resource practices in the country -especially within the dominant sector of Small and Medium-sized Enterprises-, are highly reactive, informal, and fragmented rather than proactive or strategically integrated (Psychogios et al., 2016). As a result, lifelong learning culture is fragmented as well and struggles to be established in Greek businesses.

The fact that training and development initiatives—such as upskilling and reskilling—are not usually treated as long-term strategic investments by owners and HR managers is often depicted in the phenomenon where corporate seminars are executed primarily as a means to absorb available public subsidies, such as the national LAEK funds (see ch. 4.4), without being substantially connected to the firm’s core competitive advantages or future technology roadmaps. This misalignment is deeply rooted in the characteristics of local entreprises’ attitude toward human capital development (Myloni et al., 2004). As Sarri et al. (2022)

demonstrate, the Greek socio-economic landscape requires a profound transformation toward a modern productive culture where human capital is treated as a core strategic value. More accurately, a shift toward developing entrepreneurial mindsets and core competencies through targeted education is needed. They highlight that successfully transforming macro-level policies into innovative workplace practices heavily depends on the systematic upskilling of educators and trainers, who serve as the primary vehicles for delivering these contemporary skills to the active workforce. So, for Strategic HRM to be effective in Greek enterprises, corporate leaders, SME owners and HR managers must shift from defensive personnel administration to proactive, long-term talent cultivation and relay more on the benefits of lifelong education. Such a shift would succeed in the alignment of individual continuous learning with broader national developmental goals.

4.2 The Digital Divide and Skill Obsolescence

The rapid transformation of the digital world has brought before Greece a critical challenge: the digital divide and skill obsolescence. Very quickly, competencies that were once considered advanced are merely considered basic operational requirements or have become entirely obsolete. According to the European Commission’s Digital Decade Assessment and the Digital Economy and Society Index (DESI), Greece has progressed substantially in upgrading its digital public infrastructure but there is still a prominent digital gap within its human capital (European Commission, 2025a). To be more exact, the proportion of Information and Communications Technology (ICT) specialists that are employed in Greece is a mere 2.4%, falling significantly behind the European Union average of 4.8% (Eurostat, 2024). This shortage of advanced technological expertise restricts the capacity of domestic enterprises to innovate and advance beyond the country’s limits. At the same time, the expansion of remote work based on ICT across Europe has forced employees to constantly adapt to complex digital interfaces, often without adequate preparatory training (Eurofound, 2020). In Greece, where the labour market is dominated by family-owned micro-enterprises, this sudden digital transition has been the cause of skill mismatch. According to the OECD (2026), traditional human resource practices have neglected to establish systematic Skills Assessment and Anticipation (SAA) mechanisms, thus depriving current employees of the horizontal digital literacy required to operate according to modern labour market’s demands.

This means that skill obsolescence affects both unemployed individuals seeking employment and also the existing human capital since productivity is reducing.

It is, therefore, essential to bridge this digital divide by implementing effective upskilling and reskilling strategies. In order to succeed, Strategic HRM should utilise multi-disciplinary pedagogical frameworks and interactive digital resources, embracing innovation (Sarri et al., 2022), especially when critical thinking, technological adaptability and entrepreneurial agility is the goal.

To sum up, Greek firms can significantly enhance the skills of their employees by integrating new, technologically advanced learning tools and apply digital curriculums that are fit for their growing needs. If a company aspires for its employees to truly gain new, applicable knowledge and skills, traditional "tools" as books and lectures are not enough. Employees need to be more engaged to what they are learning, so gamification of the curriculum, role-playing, simulations and active participation is what is actually currently needed in order for this knowledge to be gained and shared throughout the company as sustained corporate intellect. Therefore, when corporate SHRM frameworks adopt this method of reskilling and upskilling, complying to public digitalisation policies and aligning with its goals will be more efficient, thus aspiring to further organisational capability-building and progress.

4.3 National Policies, Lifelong Learning Governance and the Role of DYPA

The governance of lifelong learning, upskilling, and reskilling in Greece has undergone a profound structural shift. From fragmented regional initiatives it has shifted toward a more centralized system. This is mostly due to the co-financing frameworks of the European Union, specifically the National Recovery and Resilience Plan "Greece 2.0" (NextGenerationEU), the responsibility of which, concerning the national strategy followed, resides with the Greek Ministry of Education, Religious Affairs and Sports. The Ministry recently launched the "Strategic Plan for Vocational Education, Training and Lifelong Learning 2025–2027" (Ministry of Education, 2026). This strategic plan seeks to realign human capital development with modern labour market demands. In order to succeed, it prioritizes horizontal upskilling in green capabilities, advanced digital literacy, and the ethical integration of Artificial Intelligence (AI) in organisations.

One of the core operational challenges within the Greek framework has historically been the quality assurance and standardized verification of newly acquired competencies. To mitigate this, the regulatory authority responsible is the National Organisation for the Certification of Qualifications and Vocational Guidance (EOPPEP). Its role relies on certifying the curricula and output skills generated by various Training and Lifelong Learning Centers (KEDIVIM) across public universities and private providers. Under recent operational guidelines, EOPPEP's strict certification protocols ensure that upskilling initiatives directly translate training hours into officially recognized occupational profiles (EOPPEP, 2025). This transparency is critical for Strategic HRM in the private sector, as it provides HR managers with verifiable and reliable assurance that is especially valuable when they evaluate candidates that have successfully completed these training programmes.

The primary state mechanism, though, that is currently responsible for bridging the gap between labour market policies and national upskilling initiatives on an executive and implementation level, is the Public Employment Service (DYPA). The Public Employment service, with its previous name OAED, was responsible for the allocation of LAEK funds from 1996 to 2022 in both private and public sector organisations. Up to the year 2022, when OAED got rebranded into DYPA (Law 4921/2022, 2022), any organisation that wanted to train their personnel could take advantage of the Account for Employment and Vocational Training (LAEK). Greek legislation obliged employers to fund this account providing a proportion of the payroll (0.24% since July 2014) to it. Training costs of organisations could be subsidized by these funds, up to 100% of the company's contribution to the fund (Law 2434/1996, 1996). Currently, DYPA utilises substantial funding allocations from the European Recovery and Resilience Facility (RRF), the largest in the history of the Greek continuous vocational training sector. This significant funding exceeded €1 billion, aiming to retrain over 500,000 adult learners in digital and green competencies and established strategic training partnerships with global technology leaders such as Microsoft, Google, Amazon, Cisco, and Huawei (SEV, 2024; DYPA, 2024). DYPA's strategic framework focuses on mass upskilling programmes and has succeeded in training over 120,000 unemployed individuals and more than 75,000 active employees (DYPA, 2026). These large-scale public investments provide individualized vouchers to the trainees that serve as a financial incentive as well. The learning models used by the various training centres that cooperate with DYPA rely on asynchronous hybrid training. They fully align with the Council of the European Union's recommendations regarding the micro-credentials framework for lifelong learning and employability, so the Greek trainees can "stack" these qualifications over time.

Nonetheless, despite the vast financial inflows, these programmes have been accused of functioning as a mechanism that merely absorbs European funds, not succeeding in improving the structural mismatch between policy execution and actual industry needs. Historically, DYPA's initiatives have been critiqued for their supply-driven (Pisinas, 2022b), "one-size-fits-all" orientation, that seems to focus mostly on quantitative performance indicators—such as the gross volume of programme participants—rather than qualitative skill matching. Pisinas (2022b) based on a report by the Labour Institute of the General Confederation of Greek Workers (INE-GSEE) explains that training programmes in Greece are designed based on what the various Training and Lifelong Learning Centers (KEDIVIM) are already offering and on what will secure more funding, instead of taking into consideration the actual needs in production. This can be explained by the fact that the Greek governments have to comply with very strict deadlines in reference to the absorption of European funds, so the result was to emphasize mostly on how massive the training programmes are rather than the efficiency of those programmes, given that (until recently) there was no follow-up as to if there was a rise in employment of reskilled unemployed or a rise in productivity of upskilled employed personnel. In addition to this, the "one-size-fits-all" argument has been made, as it was not uncommon for an office worker in a large city to be on the same training programme as a factory worker living in the countryside, on the basis that the programme is a basic digital skills programme, not providing any specialization depending on the different fields of work. The Hellenic Federation of Enterprises (SEV, 2024), on its part, stresses that while the state and DYPA are proud of the number of people trained, the firms that are members of the Hellenic Federation of Enterprises, at a percentage of 35-40%, are still not able to find employees with the suitable skills for their job vacancies. This essentially proves that quantity may not equal quality in reference to skill matching.

With the cultivation of deep, sustainable competencies as a goal, the national strategy for the 2025–2027 period attempts to address the systemic inefficiencies mentioned above.

Stricter certification standards for external training providers have been set and funding is performance-based. Moreover, communication channels between regional employment offices and employer associations have been created in order to ensure that state-sponsored training directly supports technological adaptation of businesses (Ministry of Education, 2025). To enhance the efficiency of this type of governance, the Greek government has relied on technical assistance from supreme international bodies. A systemic evaluation was conducted through the OECD's DG (Directorate-General) REFORM project, "Improving Adult Learning in Greece", to facilitate the collaboration between public employment networks and social partners, so that the strategic objectives of the state meet the operational needs of entreprises (OECD, 2024). The DG REFORM projects wish to implement reforms focused on making the members of the EU more resilient. This project in particular focuses on supporting the design of framework for quality assurance for the Greek National Organisation for the Certification of Qualifications and Vocational Guidance (EOPPEP) in regard to non-formal and informal learning and validates prior learning for the individual emphasizing on the support of individuals with low skills. Adding to this effort, the World Bank's technical partnership introduced the PRIME Employability Assessment Tool (World Bank, 2023). The PRIME framework -via rigourous data-driven metrics- tracks the long-term employability of participants in training programmes. This shifts the national focus away from the mere financial absorption of European funds toward tangible human capital value creation. Thus, a modernized labour landscape can be established where SHRM has the potential to thrive.

4.4 Strategic HRM Practices in Greek Firms

As mentioned before, empirical execution in the Greek business sector in regard to upskilling and reskilling initiatives lacks strategic alignment with theoretical Strategic Human Resource Management frameworks. Mainstream SHRM literature, stresses the great importance of this alignment in order for sustained competitive advantage to be achieved (Banazılı, 2024). Yet many training programmes are not based on the actual specified needs of companies and the workforce, thus not adding real value toward the long-term goals of the company and of the state. Moreover, according to the Resource-Based View (RBV), training should be an essential part of organisation, one that cultivates rare, valuable, and inimitable internal capabilities in a dynamic way. However, the majority of Greek businesses struggle with the practical application of these principles, being constrained by structural and cultural factors. HR practices of Greek firms, mostly within Small and Medium-sized Enterprises (SMEs) in particular, that hold the largest percentage in Greek economy, have been characterised as informal, fragmented and reactive (Psychogios et al., 2016). Recent evaluation, after the multiple subsequent crises the economy faced in Greece, confirms the ongoing struggle of many local businesses to shift from traditional staff administration to SHRM, since they view upskilling and reskilling of their employees mostly as a short-term operational cost (Myloni et al., 2023). While the state funds training with an intention to fix macroeconomic indicators, skill enhancing programmes are still frequently aimed at merely absorbing available public subsidies as there is often still a difficulty within business owners and HR managers to understand that these programmes are crucial on improving long-term performance metrics. This misalignment derives from the broader characteristics of Greek HRM, which traditionally values administrative compliance over strategic human capital systemisation (Myloni et al., 2023) and reveals a deep-seated structural resistance to viewing human talent as a VRIO asset. This lack of strategic integration does not allow neither workforce agility nor the improvement of employee engagement as it neutralizes any transformational potential of European subsidies. In order for upskilling and reskilling to be applied efficiently and be able to yield the expected return, companies need to create an environment that allows and nurtures the creation of human capital value. As Papalexandris & Galanaki (2019) state, in Greece, workplace motivation and strategic retention of human capital are a result of transformational leadership behaviour and investment in ongoing skill enhancement of the workforce. This needs to be perceived in a correct manner by the workforce, meaning that training programmes and lifelong learning is the way to achieve career sustainability in a fast-changing world. Otherwise, the new skills learned will not be absorbed significantly, therefore the company will not be able to benefit by achieving competitive advantage according to the VRIO perspective. Business operation, thus, need fundamental redesigning toward proactive and strategic structures that absorb the knowledge provided efficiently.

4.5 Comparative Evaluation: Structural Divergence in the EU (The cases of France and Denmark)

Dypa, SEV and the Hellenic Ministry of Education, as previously stated, developed strategic initiatives that show policy mobilization towards the enhancement of digital and green competencies. However, a comparative analysis of the learning ecosystems in different European countries reveals deep structural differences. While upskilling in Greece is mostly reactive and supply-driven, member states like France and Denmark are mostly proactive and demand-driven in their upskilling systems.

4.5.1 The case of France

While the current Greek model lies in its centralised governance as upskilling initiatives are tied to specific funding timelines (e.g. the Recovery and Resilience Fund), in France the upskilling ecosystem is decentralised. The integration is systemic via the *Compte Personnel de Formation – CPF* (French Ministry of Labour, n.d.), assigning Individual Learning Accounts (ILAs) directly to citizens. ILAs is a policy, recently created by the European Union (Council of the European Union, 2022), whose purpose is to create new lifelong learning pathways (Cedefop, 2022b). The funds for this are to a degree decentralised; Skill enhancement programmes are co-financed by corporate levies and state capital. Control over their upskilling profile is given to the individual, who can build their skillset in a more autonomous way. This turns the mechanism from supply-driven to demand-driven. While a Greek employee relies on centralised public calls to access certified training, a French worker possesses automated financial autonomy to acquire micro-credentials continuously. This portability, which is universal, allows the individual to avoid the bureaucratic delays, such as those noted in Greek public vocational frameworks (EOPPEP), ensuring that the skills gained match actual corporate requirements in real-time.

4.5.2 The case of Denmark

Denmark has delt with Greece's main problem in skill enhancement (meaning the lack of alignment between national training efforts and real-time labour demands due to market shifts) in a very efficient way. It has introduced a structural policy approach named *Flexicurity* (Danish Agency for Labour Market and Recruitment, n.d.) by which constant market fluidity and constant up-/reskilling are combined. In this system, tripartite governance is ensued; the State, unions and employers cooperate, as for all three parties lifelong learning is considered a mandatory operational clause. This means that instead of a company deciding to train its staff only when they have extra time or money, they are legally obligated to set aside time and budget for continuous education (Cedefop, 2025). It is treated as an essential, non-negotiable part of doing business, just like paying taxes or following safety regulations. This approach results in fully standardized occupational profiles adapted dynamically via real-time market data as the three parties co-author training curricula.

4.5.3 Comparison and critical approach on skill enhancement programmes in Greece, France and Denmark

A first observation can be made on policy approach between the three countries; France, using the Compte Personnel de Formation shows a more proactive and individualised approach on the matter of up-/reskilling, whereas Denmark uses a more integrated, more structural way of dealing with the matter. On the other hand, Greece relies on ad-hoc upskilling pipelines, meaning its approach is more reactive.

When assessing why Greek upskilling frameworks underperform, the comparison with France reveals a fundamental design flaw: governance philosophy. The current Greek model relies heavily on a centralized, supply-driven architecture. As recent DYPA and SEV reports indicate, training is tightly bound to rigid budgeting timelines like the Recovery and Resilience Fund. This creates a bottleneck. France managed to bypass this institutional friction by anchoring its strategy on the *Compte Personnel de Formation* (CPF). What France did was simple. They gave autonomy directly to the citizens through universally portable Individual Learning Accounts, a structural move heavily endorsed in recent European guidelines to boost market agility (Council of the European Union, 2022). Because of this decentralized mechanism, a French worker continuously claims micro-credentials based on immediate corporate demands. Meanwhile, a Greek employee remains trapped in a reactive stance, waiting for centralised public calls that are often delayed and cannot be up-to-date with the labour market demands that derive from rapid technological changes.

The structural disconnect in Greece deepens when looking at how training curricula are actually updated, especially when compared to Denmark's '*Flexicurity*' system. In the Danish model, skills development isn't an afterthought; it is legally institutionalized and mandatory, produced by the cooperation of state agencies, labor unions, and employers' federations. This is where the strategic bottleneck occurs for Greek SMEs. Although organisations like SEV are efficient at mapping digital and green skill deficiencies, Greece lacks the proper skills governance framework to provide EOPPEP with these observations so it can timely readjust the Greek vocational curricula. So, while Danish enterprises utilize continuous training to gain macro-economic stability, Greek small businesses are left viewing upskilling as a fragmented, external project -one to be pursued only when subsidies are available- and, thus, do not embed it within their capabilities.

5. Applied VRIO Framework Analysis

The VRIO (Value, Rarity, Inimitability, Organization) analytical framework can be applied in order to evaluate whether human capital when skill enhanced can function as an instrument that ensures sustained competitive advantage modern Greek businesses. Traditional relevant literature argues that firms must cultivate internal capabilities that cannot be duplicated by competition within the labour market (Banazılı, 2024). Table 5.1 below was created to provide a structured mapping of the two most fundamental resource categories analysed throughout this research in the case of Greece: Advanced Digital Skills/ICT Specialization and Strategic Human Capital Management (Structured Upskilling).

Resource/ Capability	Valuable? (V)	Rare? (R)	Inimitable? (I)	Organised? (O)	Possible Achievement of Competitive Advantage
Advanced Digital Skills & ICT Specialization	Yes	Yes	No	No	Temporary Competitive Advantage/ Mismatch
Strategic Human Capital Management (Structured Upskilling Capacity)	Yes	Yes	Yes	No	Unexploited Competitive Advantage

Table 5.1 VRIO Matrix for Human Capital and Digital Skills in the Greek Corporate Sector

5.1 Evaluation of Advanced Digital Skills & ICT Specialisation

As table 5.1 depicts in regard to advanced digital skills:

- Are they valuable? Yes, because they reduce expenses and provide innovation.
- Are they rare? In Greece, they are rare. (2.4% compared to 4.8% in the EU)
- Are they difficult to imitate? No, because a company could buy a digital tool that facilitates the process or hire someone who is already highly skilled in I.T.
- Are they organised? Not so much in Greek businesses.
- Conclusion as to the achievement of competitive advantage: The competitive advantage gained is a temporary one, if not combined with the appropriate change in culture.

Using the Resource-Based View to approach the matter, it is evident why the gain in technological skills failed to provide Greek businesses with a sustained competitive advantage. The proportion of ICT specialists within the national workforce is at a mere 2.4%, confirming that these competencies apply to the criterion of Rarity in terms of the local market (Eurostat, 2024). Moreover, these skills are considered to be especially valuable, as they allow the automation of processes, ensure lower transactional costs, and facilitate entry into digitalised markets that the company did not have access to before gaining said skills. However, as shown by the VRIO framework analysis, digital competencies fail to comply with the criterion of inimitability. The globalised technology market offers alternatives to businesses, such as specialised software infrastructures, and employees with technical expertise can be acquired or poached by competitors with sufficient financial power. Thus, since the need in advanced digital skills can be met by the use of external recruitment or outsourcing, they represent a Temporary Competitive Advantage. So, if digitalisation continues to not be considered an organic capability within the firm so that it can continuously bring competitive advantage to the firm, then the resource remains vulnerable to depreciation and duplication by competitors.

5.2 Evaluation of Strategic Human Capital Management & Upskilling Capacity

As table 5.1 depicts in regard to Strategic Human Capital Management (Structured Upskilling):

- Is it valuable? Yes, because it provides innovation and long-term benefits
- Is it rare? Yes. Most Greek business do not align with its strategies.
- Is it difficult to imitate? Yes, because the culture of a firm toward lifelong learning, the upskilling mindset and the way employees cooperate within a firm take years to be built. So, it is not easy for the competition to steal or copy it.
- Is it organised? Despite the efforts, the rates are still low due to the lack of SHRM.
- Conclusion as to the achievement of competitive advantage: There is competitive advantage to be gained that currently remains unexploited.

The capacity of Greek businesses to execute continuous, structured upskilling presents a different VRIO profile. A firm that possesses a proactive, systematically managed training framework benefits from a resource that is both valuable and rare. A crucial difference that can be observed when compared to the VRIO profile of advanced digital skills is that the criterion of inimitability is in this case satisfied. Learning culture within a firm that is highly functional is difficult to be reproduced because of “social complexity” and “path dependency”. It is a product that is built throughout the years and one that requires -among others- increased employee engagement and cooperation with peers that accumulates trust and results in high performance and job satisfaction, so it cannot be replicated easily. Despite this encouraging characteristic though, Table 5.1 shows that the Strategic Human Capital Management and the capacity for structured upskilling of Greek businesses remain an unexploited competitive advantage for most of them. This is because the organisational dimension fails. Most Greek SMEs lack formalized SHRM structures. This failure in forming the necessary internal systems results into not being able to capitalise on the knowledge and skills provided via the training of the employees.

5.3 Strategic VRIO Evaluation: Assessing the Organisational Readiness of Greek SMEs

While the VRIO matrix (Table 5.1) provides a rather simple depiction of the resource configurations within Greek SMEs, a deeper critique reveals that it is an indicator of the operational trap that Greece. On paper, human capital in Greece possesses Value (V) due to high formal educational attainments, and temporary Rarity (R) amplified by the localised effects of the brain drain. However, the transition from a temporary competitive advantage to a sustained one collapses at the dimensions of Imitability (I) and Organization (O). The core issue is that the 'Value' generated by recent DYPA or state-subsidised digital upskilling programmes is highly imitable. If an SME trains an employee in basic data analytics or digital marketing using public funds, a competing firm can easily duplicate this asset by hiring away that exact employee or utilizing the same public subsidies. The resource lacks causal ambiguity; there is no proprietary, internal organisational routine that makes this training unique to the specific firm. This brings us to the ultimate strategic failure for Greek small businesses that is the Organization (O) dimension. The fact that most Greek micro-enterprises operate without a Strategic Management framework means they lack the capacity to absorb and deploy the newly acquired skills. Upskilling programmes deliver knowledge to the individual, but the firm lacks the internal structures to benefit from this knowledge in the long-term. Consequently, Greek SMEs experience a high turnover rate, since trained employees eventually migrate to larger corporations or multinationals that possess the 'Organization' to leverage their skills.

5.4 Individual Learning Accounts (ILAs) as a Strategic Framework for Overcoming Organisational VRIO Barriers

To effectively bridge the "strategic implementation gap" identified in the VRIO analysis, national upskilling strategies must transition from supply-driven financing to demand-driven, person-centered approaches. In order to address this problem, the European Union, as stated before, recently created a policy, Individual Learning Accounts (ILAs). ILAs purpose is to create new lifelong learning pathways, especially within fragmented socio-economic ecosystems, dominated by small and medium-sized enterprises, as is the case in Greece (Cedefop, 2020). Traditionally, the efficacy of large financial inflows, such as those originating from the Recovery and Resilience Facility (RRF) and administered via the Public Employment Service (DYPA), reaches a limit depending on the HR systems of Greek SMEs. As demonstrated by the VRIO matrix, these smaller entreprises do not often consider state-sponsored training as a core strategic asset for their business, ultimately depriving them of sustained competitive advantages.

The strategic integration of ILAs alters this dynamic completely by decoupling skill acquisition from the firms' HR structures. According to the foundational analytical frameworks for adult upskilling, an ILA framework offers the initiative of training directly to the individual worker (Cedefop, 2020). By establishing personal learning accounts, employees enjoy entitlements to training over time, and can initiate these kinds of trainings according to their interests, the demands of the labour market and their individualised career progression goals. From a Strategic Human Resource Management (SHRM) perspective, this decentralization could be the solution for the structural problem in SMEs' HR departments. Instead of forcing a micro-entreprise without a formal HR department to design, schedule, and evaluate upskilling programs, the state-sponsored ILA system provides quality-assured training programs. On the employee's part, this guarantees continuous capability building and sustained employability. On the SME's part, it mitigates the direct administrative cost and operational burden of workforce development. This lets the firm absorb upgraded human capital that has been upskilled without any intervention from the firm. By integrating ILAs into the national strategy, public upskilling investments transform into a flexible, macro-level HR tool that offers rare and valuable digital competencies to businesses, in a way that by-passes the problem the existence of which was made obvious by the VRIO framework analysis.

6. Conclusions and Recommendations

6.1 Theoretical Contribution - Conclusions

This study contributes to the fields of Strategic Human Resource Management (SHRM) and the Resource-Based View (RBV) by providing an analysis of workforce upskilling and reskilling in Greece. Dominated by SMEs with a distorted approach toward lifelong education and skill training as a cost rather than an investment and in a socio-economic environment gradually recovering after multiple consequent crises, the Greek economy has to face a misalignment between theoretical suggestions and empirical constraints in regard to enhancing the skills of individuals in the labour market. This research tries to deepen the understanding of this critical gap in the market by structurally mapping that friction. While significant European and national funds are available for digital upskilling and reskilling, Greek SMEs struggle greatly to absorb them and achieve long-term use of them. The theoretical novelty of this paper lies in applying the VRIO framework, the results of which demonstrate that this issue is structural. The core problem lies in the "Organisation" dimension. Most small and medium entreprises lack the administrative structures and SHRM approach needed to integrate these new skills among their employees. Therefore, Greek firms must upgrade radically their internal organisational structure and learning culture to transform these training resources into a sustained competitive advantage.

An alternate -and probably more applicable- approach to overcome the organisational barriers identified through the VRIO analysis, is for Greek entreprises and policymakers to transition toward Individual Learning Accounts (ILAs). ILAs, as depicted in the case of

France, successfully bypass the structural limitations and HR resource scarcities of smaller firms by shifting training entitlements directly to the employees, thus, ensuring a continuous, agile skill development process that is directly aligned with evolving market demands.

6.2 Strategic SHRM Recommendations

6.2.1 Recommendations for Greek Entreprises

The problem has become clear that Greek businesses fail to achieve a sustained competitive advantage because they do not satisfy the organisational criterion of the VRIO framework. Thus, radical restructuring is needed in the management of human resources, because of the high speed of digital economy progress. In order to achieve this, three strategic pillars are proposed to help integrate SHRM.

Strategic Pillar 1: Predictive Workforce Planning and Skill Mapping

HR departments must identify existing technological gaps and use information and professional intuition in order to close the current gap and prepare for future skill requirements. This ensures that the core operational goals of the company will be supported and that the training provided to employees is an investment that can be fully utilised permanently within the firm as compounding knowledge. On this matter, international best practices can be used in order to monitor the linking of long-term skilling strategies with the desired outcome. Employability and performance can be measured using, for example, the PRIME Employability Assessment Tool, which enables institutions to track training efficacy so that human capital development is aligned with evolving demands (World Bank, 2023).

Strategic Pillar 2: Experiential and Digitalized Learning Systems

The current lecture-based structures in corporate skill enhancement need to be substituted by more innovative and interactive digital resources as well as multi-disciplinary pedagogical frameworks (Sarri et al., 2022). The use of experiential learning models into can lead companies toward a more agile corporate culture that embraces technological adaptability and entrepreneurial agility, embedding the acquired knowledge within the firm's routines and, therefore, be highly inimitable by competitors.

Strategic Pillar 3: Strategic Cooperation and Public-Private HR Alignment

In order for the existing skills mismatch to be bridged, macro- and micro-level alignment needs to be achieved, meaning state initiatives and HR corporate strategies as well. Direct communication channels must be established between public employment networks such as DYPA (OECD, 2024) and firms, and ensure the continuation of clearly communicating of Greek companies' needs. Regional employer associations may prove especially helpful on this matter. By actively participating in the co-design of continuous vocational training curriculums, firms can ensure that state-funded upskilling programs align with corporate SHRM frameworks, effectively converting technological disruption into long-term capability-building.

6.2.2 Managerial Implications

From a managerial perspective, contemporary strategic frameworks emphasize that HR executives must move beyond traditional administrative roles and actively conduct systematic resource audits (Antony & Anuradha, 2026). This is particularly critical for the management of intangible assets, such as specialised knowledge and digital competencies. These assets represent the core drivers of the modern digital economy but cannot be measured through conventional metrics (Antony & Anuradha, 2026). Therefore, managers and HR leaders must actively connect their daily workflows with the digital skills of their employees. This coordination is the only way to protect the company's knowledge. If a business does not integrate these skills into its official routines, the advantage will be temporary because employees can leave or technology can change. By building a strong organisational structure around these human resources, managers can turn temporary individual skills into a permanent, long-term competitive advantage that competitors cannot easily copy (Antony & Anuradha, 2026).

6.2.3 Recommendations for Policy Makers

For policymakers, this research underscores that flooding the market with European Recovery and Resilience Facility (RRF) funds through centralised employment networks such as DYPA does not create long-term labour stabilization. Unless qualitative industry matching is prioritized against quantitative participation targets, the results will continue to be of a short-term nature. It should be taken into consideration is that skill enhancement training should be both relevant and of high quality (OECD, 2025). This means that governments and companies need to work together to make sure training courses are useful. Governments can give financial support, but they must strictly check the training schools and make sure those schools deliver good results. This stops low-quality providers from profiting without providing value. As for the companies, instead of forcing employees to take courses that are often tedious and basic, just to state participation, they should be given incentives that will encourage them to offer high-quality training that actually helps workers grow their careers, and in return improve the quality and quantity of work provided for the company.

Another parameter to consider is that national digitalisation policies must be structurally co-designed with companies' HR managers in order to achieve the conversion of macroeconomic funding into firm-level capability-building (OECD, 2024).

In addition, policy makers should take into serious consideration the integration of ILAs as part of the national strategy for upskilling and reskilling as this might prove to be a key solution to bypass the rigidity of SMEs HR departments. It is for everyone's benefit to make lifelong learning a reality for all employers and employees. Skill enhancement strategies should be data-driven and flexible enough to adapt to evolving demands, but also accessible to low-skilled adults, older workers and people who generally have fewer opportunities, ensuring that everyone can participate in such training programmes.

Another recommendation (groundbreaking for Greece considering its past modus operandi in the public sector) would be for governments to lead the way by hiring public sector workers based on what they can do rather than just their diplomas and, in turn, encourage private businesses to do the exact same thing. Then clear, simple systems could be ensued to test what people know, officially recognize their skills, and make certificates easy to transfer from one job to another. Credential portability makes it much easier for workers to switch jobs and helps companies find the right talent. This "skills-first" approach (OECD,

2025) would result in fixing labour shortages faster as well as sparking innovation and making the job market more active.

Good career guidance is also of upmost importance; offering clear, honest, and unbiased career advice is the best way to help people choose the right training and find the best jobs for them, especially when reskilling is needed. Thus, governments can make career counseling much more available in schools and public job centers. They can also use digital tools and apps to give people personalised, one-on-one advice. This way, people can find the right training courses in order to change careers or move between jobs smoothly. On the plus side, they can break away from old stereotypes (for example: gender-based jobs) that might otherwise stop them from pursuing their dream jobs.

Finally, training systems should let people easily move back and forth between vocational routes, academic routes, and real-world jobs (OECD, 2025). To make this happen, clear pathways where people can stack up short, specific certificates over time are needed. In addition, people should be given recognition for what they already know from past work experience. This helps workers move to completely different industries (horizontal mobility-reskilling) or get promoted into higher roles (vertical mobility-upskilling) and keeps the workforce highly adaptable. It ensures that what people are learning always matches what companies actually need to hire for as the job market changes.

6.3 Limitations and Future Research

The goal of this research was to provide significant insights into the current state of lifelong education, upskilling and reskilling in Greece and reach scientifically important conclusions that could serve as the basis for future reference in relevant studies. Nevertheless, the limitations of this effort must be acknowledged.

Firstly, the fact that this research relies on secondary data synthesis exclusively (reports, peer-reviewed scientific articles, national strategic plans, macroeconomic indicators, etc.), may provide solid foundation for the understanding of lifelong learning in the Greek economy, but deprives this research of primary empirical data.

A second observation as to the limitations is that this research could not tackle the heterogeneity of Greek firms. It focuses primarily on the dominant sector of the Greek economy, that of Small and Medium-sized Entreprises, so other sectors, such as tourism or maritime sector, have not been disaggregated. Therefore, the conclusion from the VRIO framework analysis and the recommendations resulting from that should be interpreted more as general guidelines.

These two limitations present many interesting opportunities for future academic research on the matter:

- Quantitative surveys could be conducted in order to measure the exact correlation between state-sponsored training investments (such as DYPA initiatives) and long-term firm performance metrics.
- Interviews with SME owners and HR managers would allow for a more real-time evaluation of the situation.
- Presenting case-studies could also help reveal the rationale behind firm-level behaviours.
- Analysing good practices of Greek firms that have successfully overcome the "Organization" barrier of the VRIO framework.
- Finally, comparative studies between Greece and other Southern European nations could illuminate whether the identified strategic implementation gaps are uniquely Greek or representative of wider regional socio-economic dynamics.

6.4 Final Synopsis

In conclusion, the challenge of addressing the skills mismatch and bridging the digital divide in Greece is a strategic and cultural imperative. Traditional, reactive paradigms of management are proving obsolete in the face of rapid change in the characteristics and the needs of the economy. Transforming the Greek workforce into an adaptable, digitally ready asset requires a well-executed effort where state initiatives and the firms' SHRM structures operate in absolute alignment. By converting training from an operational liability into a strategic investment, Greek businesses can successfully achieve competitive resilience.

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