

ECONOMIA MARCHE Journal of Applied Economics

Vol. XLIV, No.1, Giugno 2025

Strategic Value of Certifications in Manufacturing Companies: Analysis of the Leading Companies in the Marche Region

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Abstract

Certifications play a crucial role in enhancing a company's reputation across multiple dimensions as they verify compliance with established norms and standards in areas such as safety, quality, and sustainability. Nowadays, sustainability certifications are particularly impactful, guiding consumer choices toward environmentally friendly products and encouraging companies to improve continuously. Social certifications, emphasizing workers' rights, gender equality, and fair wages, further reinforce ethical and social responsibility. However, obtaining certifications involves significant investment, rigorous compliance, and addressing legal and bureaucratic requirements.

In Italy, Accredia oversees the validity of system certification processes, ensuring alignment with international standards and fostering transparency and reliability in certified companies.

This article aims to analyse the main companies in the Marche Region, as listed in the annual Fondazione Aristide Merloni's ranking through the possession of certifications, with particular focus on four key sectors: Fashion, Agri-food, Furniture, Automation and Machineries.

The research was conducted analysing companies websites and the Accredia database, looking for certifications and analysing the results to evidence the most achieved and the gaps between companies and sectors.

It emerges that larger companies have a greater capacity to obtain system certifications and that the numbers are growing for sustainability certifications, while it is noted that smaller companies have a lower rate of adoption, being more influenced by financial and organisational obstacles.

JEL Classification: L25; L60

Keywords: Certifications; Sustainability; Sector Studies; Marche Region; Company Performances

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1. Introduction

ertifications are a key tool to enhance a company's reputation and credibility in many ways [1]. By certifying compliance with norms and standards in various areas, including safety, quality, environmental and social sustainability, companies can communicate that they meet certain requirements, increasing the possibility of accessing value chains that require high standards and, thus, competitiveness in their sector.

In Italy, the role of ensuring the validity and authenticity of these processes is entrusted to Accredia, the single national accreditation body for major system certifications. Accredia verifies that certification, inspection and verification bodies comply with international standards [2]. This ensures that certified companies are truly aligned with globally recognised standards of quality and transparency. Other certifications, particularly product or process certifications, are not surveyed by Accredia, but are still relevant in the sector in which they specialise.

Today, acquiring certifications is not only a competitive advantage, but a requirement, even when it comes to voluntary certifications, for acquiring credibility and reliability, criteria that are fundamental for the evaluation of any company by consumers and stakeholders.

Currently, a particularly growing area for certifications concerns sustainability, both social and environmental [3].

These not only guide consumers towards products with a lower environmental impact, promoting more conscious purchasing choices, but also stimulate competition between companies, pushing them to continuously improve to respond to new market needs and sustainability challenges at system level [4]. Environmental certifications cover different fields of application, from a system level with the implementation of environmental monitoring systems (e.g., ISO 14001), to a product level (e.g. Environmental Product Declarations, based on the results of environmental monitoring systems such as Life Cycle Assessment).

Certifications based on social criteria include assessments on aspects such as the adequacy of wages, respect for workers' rights, decent working conditions, health and safety and gender equality [5]. These aspects, which combine social and economic sustainability, allow companies to stand out not only for growth, but also for ethical and social responsibility.

A further positive aspect comes from the simplification and production efficiency resulting from standardisation. A methodical approach to processes to increase quality and environmental sustainability often has positive spin-offs in the optimisation of economic, human and time resources.

Although the acquisition of certifications is desirable, there are obstacles that micro, small and some medium-sized companies, in particular, struggle to overcome in order to comply with the standards required.

A great deal of time is spent by companies and many resources invested in pursuing certain standards; in addition to the considerable costs, the maintenance of requirements and the resulting legal complexity should not be underestimated. In fact, all certifications are required to follow specific regulations; failure

to meet these requirements slows down bureaucratic procedures that, together with a lack of corporate knowledge and training, make it difficult to achieve the certification goal [6], [7]. Companies require external support, given the complexity of the processes to achieve compliance and ensure they are in line with requirements, which is related to costs.

This paper aims to analyse the adoption of certifications in the main companies in the Marche Region, based on the 2023azione Aristide Merloni's annual ranking of the top 500 companies by turnover.

The analysis is aimed at understanding how companies communicate their commitment and in which specific areas, also trying to understand the actual impact of the barriers to obtaining certifications, and whether this is influenced by the size of the companies themselves, particularly on specific manufacturing sectors.

The article consists of an Introduction, the Methodology used for the analysis, the Results and related Discussion, and finally the Conclusions.

2. Data and methods

The analysis is carried out starting from the annual Ranking of the leading Marche Region enterprises 2023-2024 [8] (hereinafter referred to as the Ranking), which collects and sorts the enterprises of the Marche Region according to turnover, counting the first 500 positions.

The companies subject to this analysis are those in manufacturing sector, including those in the ATECO Section C - Manufacturing Activities, with ATECO codes from 10 to 33.

Of these, it has been analysed the content of their websites, companies' main communication tool with stakeholders where, if present, the non-financial report is also shared. The websites were extracted from the AIDA BVD database. In addition to this, the Accredia certification database [2] has been also consulted. It should be emphasised that this approach gathers most of the certifications obtained and shared by companies, taking a snapshot of what companies communicate externally from the perspective of consumers and other stakeholders. However, the results may contain gaps due to sites not being upto-date or very specific certifications related to on-demand products that may not be communicated publicly but only internally to the client. In any case, the objective of the study is configured on the identification of certifications that may represent a competitive advantage with a view to entering national and international value chains and increasing trust and transparency in the eyes of external stakeholders, especially consumers, so this potential limitation does not invalidate the objective of the study.

Starting from this point, five clusters were identified:

The first concerns the top 25 manufacturing companies in the ranking, thus a horizontal, non-sector-specific cluster, which includes the largest companies in the region. This makes it possible to relate the type and number of certifications to the size of the enterprises regardless of sector.

The other four clusters have been identified by specific sectors, particularly those recognised by the regional Smart Specialisation Strategy (S3) as those that strengthen the innovative capacity of the consolidated and representative production systems of Marche Region [9]: Fashion and Textile, Agrifood, Furnitures, Automation and Machineries.

The first sector therefore includes all the companies in the ranking that operate in the textile, clothing, leather and footwear sector, thus named TCLF sector (textile, clothing, leather, footwear) with ATECO codes 13, 14 and 15; the second, the manufacturing sector in the agri-food sector, is made up of companies with ATECO codes 10 and 11; the third sector, which includes companies operating in the home, furniture and interiors sector, is made up of companies with ATECO code 31; finally, the fourth sector, with companies in the automation, mechanics and engineering sector, includes companies with ATECO codes 26, 27 and 28.

SECTOR	TCLF	AGRI- FOOD	FURNITU RE	AUTOMAT ION
ATECO code	13-14-15	10-11	31	26-27-28

Table 1. Sectors identified and related ATECO codes.

Each company was analysed, identifying references to certifications, which were collected and analysed as shown in the Results section.

Differences emerged, during the research, between the different companies in terms of the visibility of these certifications: on some websites the certifications obtained are placed in the foreground while in other cases it is more complex to locate them, as they are present at a greater depth within the site map. During the research, the main system certifications (i.e., ISO 9001, ISO 14001 and ISO 45001) were highlighted as they are those that define the adoption of quality, environmental and health and safety management systems, respectively, and are not sector-specific and they present on the Accredia database [10].

3. Results

From the application of the methodology, the following results emerged. The ranking contains 500 enterprises in total, of which 270 fall within the manufacturing sector.

Of these, the companies analysed, in addition to the top 25 in terms of turnover, were 39 in the TCLF sector, 22 in the agri-food sector, 28 in the furniture sector and 58 in the automation sector.

3.1. Top 25 companies results

For the top 25 companies, the graph in Figure 1 presents the results for the identified certifications, with a high percentage of companies with the top three system certifications.

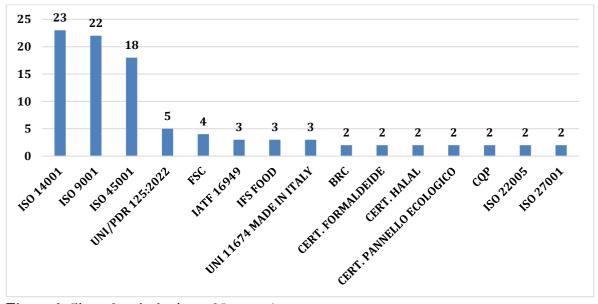


Figure 1. Chart of results for the top 25 companies

Table 1 shows the certifications found also in percentage values. Certifications identified with "Other certifications" identify certifications that were only found in one company.

Certifications	TOTAL	TOTAL	NOTEs
		IN %	
ISO 14001	23	92%	
ISO 9001	22	88%	
ISO 45001	18	72%	
UNI/PdR	5	20%	
125:2022			
FSC	4	16%	
IATF 16949	3	12%	
IFS Food	3	12%	
UNI 11674	3	12%	
BRC	2	8%	
Cert.	2	8%	
formaldeide			
Cert. Halal	2	8%	
Cert. pannello	2	8%	
ecologico			
CQP	2	8%	
ISO 22005	2	8%	
ISO 27001	2	8%	
Other	1	4%	REG. CE 834/2007; AGRICOLTURA BIOLOGICA; BCORP; DOP;
certifications			DTP 030 E 049; DTP 126; EN 15088; EUK; GREEN GUARD;
(26)			INDOOR HI-QUALITY; ISCC; ISO 13485; ISO 15504; ISO 17025;
			ISO 37001:2016; ISO 50001; EPD; RSPO; SA8000; SDC14; SOA; STG;
			TISAX LABEL; UL 2818; UNI EN 12591; VEGAN OK

Table 2. Table of results for the top 25 companies

3.2. TCLF sector results

For the TCLF sector, the situation does not appear entirely positive, considering the percentage values of adoption of the different certifications (Figure 2):

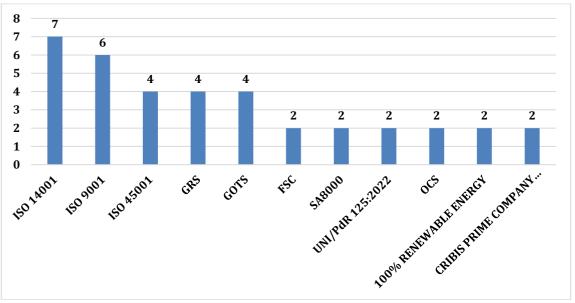


Figure 2. Chart of results for the TCLF sector

Table 3 shows the results in percentage terms for the TCLF sector.

Certifications	TOTAL	TOTAL	NOTEs
		IN %	
ISO 14001	7	18%	
ISO 9001	6	15%	
ISO 45001	4	10%	
GRS	4	10%	
GOTS	4	10%	
FSC	2	5%	
SA8000	2	5%	
UNI/PdR 125:2022	2	5%	
OCS	2	5%	
100% Renewable	2	5%	
Energy			
CRIBIS Prime	2	5%	
Company Rating			
Other certifications	1	3%	RESPONSIBLE WOOL STANDARD; AQAP
(4)			2110:2016 EDIZIONE D; HEALTH AND
			TEXTILE; ZQ

Table 3. TCLF Industry Results Table

3.3. Agri-food sector results

For the agri-food sector, in contrast to the other clusters, product and process certifications are more present, even compared to system certifications (Figure 3):

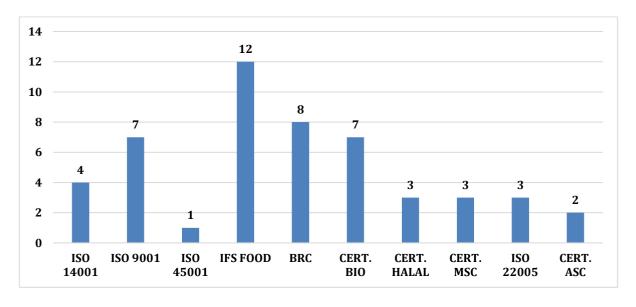


Figure 3. Chart of the results for the agri-food sector.

Table 4 also shows the results in percentage terms for the certifications recorded in the agri-food sector.

Certifications	TOTAL	TOTAL	NOTEs
		IN %	
ISO 14001	4	18%	
ISO 9001	7	32%	
ISO 45001	1	5%	
IFS FOOD	12	55%	
BRC	8	36%	
CERT. BIO	7	32%	
CERT. HALAL	3	14%	
CERT. MSC	3	14%	
ISO 22005	3	14%	
CERT. ASC	2	9%	
Other	1	5%	AGRICOLTURA BIOLOGICA; B-CORP;
certifications (20)			CERT. QM; REG. CE 834/2007; CERT.
			FAIRTRADE; CERT. GLUTEN FREE; CERT.
			GMP+; DOP; DTP 030 E 049; DTP 126; EPD;
			EQM; EQUALITAS; EUK; FSSC 22000; IFS
			LOGISTIC; RSPO; STG; UNI/PDR 125;
			VEGAN OK

Table 4. Table of results for the agri-food sector.

3.4. Furniture sector results

For the furniture sector, system certifications, particularly for quality and increasingly for environmental sustainability are among the most widely adopted (Figure 4):

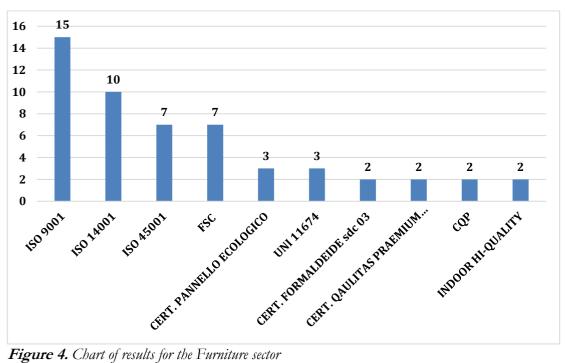


Figure 4. Chart of results for the Furniture sector

Table 5 shows the results in percentage terms for the sector:

CERTIFICATION	TOTAL	TOTAL IN %	NOTEs
ISO 9001	15	54%	
ISO 14001	10	36%	
ISO 45001	7	25%	
FSC	7	25%	
CERT. PANNELLO	3	11%	
ECOLOGICO			
UNI 11674	3	11%	
CERT.	2	7%	
FORMALDEIDE			
SDC 03			
Cert. Qaulitas	2	7%	
Praemium Cosmob			
CQP	2	7%	
INDOOR HI-	2	7%	
QUALITY			
Other certifications	1	4%	AEOF; CATAS QUALITY AWARD
(11)			FORMALDEHYDE; CERT. AJA; CERT. CARB 2;
			COSMOB- CERT. CIRCOLARITÀ DEL
			PRODOTTO; IATF 16949; ICILA; ISO 27001;
			PEFC; SDC 14; UL 2818 GREENGUARD

Table 5. Table of results for the Furniture sector

3.5. Automation and Machinery sector results

For the automation and machinery sector, system certifications are strongly present, while product certifications are less detected, also due to the variety of sectors these companies work with, and the specificity of the products manufactured (Figure 5):

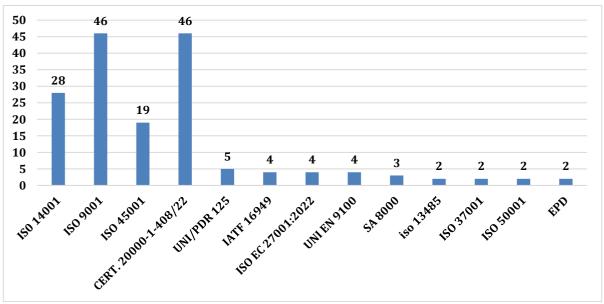


Figure 5. Chart of results for the Automation and Machinery sector

In Table 6, the results in percentage:

CERTIFICATIONS	TOTAL	TOTAL	NOTEs
		IN %	
ISO 14001	28	48%	
ISO 9001	46	79%	
ISO 45001	19	33%	
Cert. 20000-1-408/22	46	79%	
UNI/PDR 125	5	9%	
IATF 16949	4	7%	
ISO EC 2700	4	7%	
UNI EN 9100	4	7%	
SA 8000	3	5%	
ISO 13485	2	3%	
ISO 37001	2	3%	
ISO 50001	2	3%	
EPD	2	3%	
Other certifications	1	2%	AEOF; CERT. NADCAP; EN 14141; ISO
(7)			15504; ISO 17025; SOA; TIXAS LABEL

Table 6. Results table for the Automation and Machinery sector

4. Discussion

Each sector has distinct priorities and characteristics shaped by its production chains and unique requirements. These differences are often influenced by company size, with larger companies being better positioned to invest in advanced tools and certifications.

The analysis focuses on the clusters identified highlighting the peculiarities and trends within each.

4.1. Automation and Machinery sector results

The analysis of the top 25 manufacturing companies shows an increase in the adoption of new certifications. Compared to the year 2022-2023 [1] there has been an increase for all system certifications. This can be translated into a continuous search by companies for innovation that increases competitiveness, operational efficiency and adaptation to global trends, with the need to communicate and validate this effort.

An increase can also be seen in the number of certifications for gender equality and preventing discrimination in the workplace; they indicate that the company is actively committed to ensuring equal opportunities for men and women in areas such as recruitment, remuneration, careers and organisational culture, as well as having a positive impact on corporate image.

There is also a small increase for FSC certification for practices and policies that ensure that the wood-based materials used in their products come from sustainably managed forests, especially packaging.

This phenomenon demonstrates the growing importance of certifications for major industry players, who are integrating them as an essential part of their operational and competitive strategies. Certifications are key tools for ensuring regulatory compliance, quality and market confidence. A clear positive correlation between turnover and certification adoption reflects how companies with more resources can more easily

invest in these tools. On the other hand, there is a need to support smaller companies by facilitating access to certification processes so that they can compete effectively and benefit from the opportunities offered by global markets.

4.2. TCLF sector

In the fashion industry, the adoption of certifications remains relatively limited, particularly among smaller companies. However, there is a higher rate of certification adoption among companies occupying higher positions in the Ranking, illustrating the correlation between higher turnover and a greater propensity to pursue certifications. Larger companies often have the financial and operational capacity to meet the demands of certification processes, which smaller businesses frequently lack.

One significant factor contributing to this disparity is the small size of many fashion companies. Limited resources and capabilities often restrict these smaller entities from fully integrating into the supply chains of large international brands. These global players are increasingly stringent about certified standards, requiring suppliers to meet rigorous criteria for quality, sustainability, and ethical practices. As a result, smaller companies often find themselves excluded from lucrative partnerships and collaborations, despite their potential.

This dynamic poses a challenge to many companies in the fashion sector, as certifications have become critical for gaining access to global markets and forming partnerships with international brands. Without certifications, smaller companies struggle to compete on a level playing field, further entrenching disparities within the industry.

This scenario underscores the need for targeted policies and tools to reduce barriers to certification for smaller companies. Financial support, streamlined certification processes, and monitoring methodologies could help bridge the gap, enabling smaller businesses to achieve the necessary standards and unlock opportunities for growth and collaboration in the global market [11].

4.3. Agri-food sector

The agri-food sector demonstrates a high level of adoption of system certifications, driven largely by the prestige and recognition associated with the "Made in Italy" brand. These certifications, particularly quality standards like ISO 9001, are essential for ensuring transparency and fostering trust among consumers, suppliers, and other market stakeholders, particularly relevant in the food industry.

This trend highlights a significant connection between a company's financial capacity and its ability to implement and sustain such certifications. Larger companies, with greater turnover and more substantial resources, are better equipped to handle the financial and operational demands associated with certification processes. These demands include implementing quality management systems, undergoing regular audits, and adapting to evolving regulatory requirements. By maintaining these standards, these companies are able to meet market expectations, securing consumer confidence and expanding their reach globally.

In contrast, smaller companies often face greater challenges in adopting certifications due to limited resources, which may constrain their ability to invest in the necessary infrastructure and expertise. This disparity underscores the role of financial robustness in achieving and sustaining high certification standards, which, in turn, contributes to the overall competitiveness and growth of the agri-food sector.

4.4. Furniture sector

In the furniture sector, the adoption of certifications generally shows average levels, with companies prioritizing sector-specific certifications tailored to their unique production processes and product types. These certifications often focus on material quality, sustainability, and safety standards directly relevant to furniture manufacturing. However, for leading companies, particularly those with more complex

supply chains and a significant export orientation, the adoption of system certifications, such as ISO 9001 for quality management or ISO 14001 for environmental management, becomes essential.

These system certifications provide a framework for standardized processes, enhancing operational efficiency and ensuring compliance with international norms. By integrating both sector-specific and system certifications, leading companies are better equipped to address regulatory requirements, meet customer expectations, and maintain competitiveness in global markets. This targeted approach demonstrates a strategic alignment with evolving market demands and underscores the importance of certifications in establishing trust, ensuring product quality, and expanding into international markets. It reflects the sector's ability to balance regulatory obligations with market-driven goals, thereby strengthening its position in a highly competitive industry.

4.5. Automation and Machinery sector

The automation and machinery sector stands out for its remarkably high adoption of system certifications. This is driven by the sector's need to technical, safety, and management standards that align with the advanced technology integral to its operations.

Additionally, the sector features a significant number of product certifications. However, these are often concentrated among a small number of companies due to the highly specialized nature of the product segments within the industry. Many of these product certifications are not publicly disclosed, as the products are frequently custom-made for specific projects, making public dissemination of such certifications less relevant. This practice reflects the project-specific focus of many businesses in the sector.

While quality remains the cornerstone of certification criteria in this field, there is a growing emphasis on environmental and social sustainability. This shift indicates that companies are increasingly recognizing the importance of aligning their operations with broader sustainability goals. Despite this emerging trend, the sector continues to prioritize quality as its primary certification benchmark, underscoring the critical role of precision and reliability in automation and machinery.

5. Conclusions

The adoption of certifications across different sectors is closely tied to the specific demands and contexts of each industry. Larger companies generally have more resources and capacity to secure certifications, particularly system certifications, while smaller companies often struggle due to limited financial and technical support. The increasing emphasis on sustainability has led to a significant rise in the adoption of certifications related to environmental and social issues, driven both by growing awareness and by stricter regulations. However, smaller businesses still face notable challenges in navigating the certification process, highlighting the need for targeted support to help them adapt.

To address these issues and promote wider adoption of certifications, several key strategies should be considered. First, companies must place greater emphasis on clear and transparent corporate communication. Improved communication would not only enhance visibility and trust but also demonstrate a company's commitment to meeting industry standards and addressing sustainability concerns.

Another critical area is the need for companies to invest proactively and incrementally in frameworks and processes that facilitate certification readiness. Gradual adoption allows businesses, particularly smaller ones, to manage the transition without straining their resources, enabling them to remain competitive in a rapidly evolving global market.

The implementation of life-cycle-based environmental performance monitoring tools, such as Product Life Cycle Assessment (LCA) and Organizational Life Cycle Assessment (OLCA), is essential in this context. These tools provide a standardized and scientific methodology for assessing and improving sustainability performance. By tracking environmental impacts across a products or organization's entire life cycle, these approaches enable businesses to identify areas for improvement and align their practices with certification criteria.

For smaller companies, the integration of such tools can be transformative. It offers a clear, data-driven pathway to achieving certifications while simultaneously improving efficiency, reducing operational costs, and enhancing overall sustainability. Beyond enabling certification, the adoption of these methodologies offers a strategic advantage in international markets, where certifications are increasingly becoming a prerequisite for competitiveness. In this way, smaller businesses can strengthen their position and adapt more effectively to the growing demands of sustainability and regulatory compliance.

References

- [1] Liscio M.C., Sospiro P., 2023, La presenza di certificazioni nelle imprese della Classifica, https://doi.org/10.57638/3034-8234CERTCL
 - [2] Accredia, Certificazioni, https://www.accredia.it/banche-dati/certificazioni/
- [3] Tarí J.J., Molina-Azorín J.F., Heras I., 2012, Benefits of the ISO 9001 and ISO 14001 standards: A literature review, http://dx.doi.org/10.3926/jiem.488
- [4] Benedetti, A., 2021. Le certificazioni ambientali. In Rossi G., Farì A. (a cura di), Diritto dell'ambiente, Torino: Giappichelli, https://hdl.handle.net/10281/310021
- [5] Merli R., Preziosi M., Massa I., 2015, Social Values and Sustainability: A Survey on Drivers, Barriers and Benefits of SA8000 Certification in Italian Firms, https://www.mdpi.com/2071-1050/7/4/4120
- [6] Mazzi A., Toniolo S., Mason M., Aguiar F., Scipioni A., 2016, What are the benefits and difficulties in adopting an environmental management system? The opinion of Italian organizations, https://doi.org/10.1016/j.jclepro.2016.08.053
- [7] Hulshof M., Daneva M., 2021, Benefits and Challenges in Information Security Certification –A Systematic Literature Review, https://doi.org/10.1007/978-3-030-79976-2_9
 - [8] https://www.fondazionemerloni.it/wp-content/uploads/2024/11/Classifica_2023_WEB.pdf
- [9] Regione Marche, 2021, Ambiti tematici della Strategia di Specializzazione Intelligente 2021-2027 della Regione Marche, https://www.regione.marche.it/Entra-in-Regione/Marche-Innovazione/Strategia-di-Specializzazione-Intelligente-S3-2021-2027/Ambiti-Tematici
 - [10] Accredia, Certificazioni, https://www.accredia.it/servizi-ccreditati/certificazioni/#65c4f65ad0162.
- [11] De Ponte C., Liscio M.C., Sospiro P., 2023, State of the art on the Nexus between sustainability, fashion industry and sustainable business model» Sustainable Chemistry and Pharmacy, 10.1016/j.scp.2023.100968.