

Transnational Report

DECO- ENTER4FUTURE

**Developing need-based entrepreneurial competences and
showing opportunities in entrepreneurship**

**Activating potentials for sustainable economic
development in rural regions**

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1 INTRODUCTION

This research report was developed within the framework of a transnational project dedicated to analysing the entrepreneurial environment in Germany, Portugal, Italy, and Lithuania. The objective is to assess the main barriers to entrepreneurship, examine existing support mechanisms, and identify the specific needs of VET learners with entrepreneurial ambitions. The selection of countries reflects a diversity of economic structures, levels of entrepreneurial activity, and institutional support systems within the European Union, offering a comparative perspective across different national contexts, particularly in rural and economically fragile areas.

The aim of this examination was to identify the main obstacles VET learners face when starting their own business and to highlight emerging entrepreneurial opportunities within their regions. Special attention was given to gender-specific barriers, recognizing that unequal access to resources, networks, and support continues to affect entrepreneurial participation. By understanding these challenges in detail, the research intends to support the design of targeted actions that promote greater gender equality and contribute to the long-term sustainability and resilience of local economies where the project partners are active and their entrepreneurial landscape.

The research methodology combined a thorough desk-based review with qualitative interviews conducted in each participating country. This dual approach allowed for the identification of both structural trends and personal experiences, highlighting how national policies, access to finance, educational pathways, and socio-cultural attitudes influence entrepreneurial intentions and outcomes. Interviews provided direct insights into the day-to-day challenges of starting and maintaining a business, particularly in relation to bureaucratic complexity, market access, and professional training.

To ensure comprehensive and comparative findings, interviews were carried out with 10 VET learners in each project group, resulting in a total of 40 participants. In addition, 5 individuals per country involved in entrepreneurship or entrepreneurship education, such as business owners, trainers, and support professionals were interviewed, adding another 20 perspectives to the dataset. This approach ensured that both learner experiences and expert insights were captured. Interviews followed target group-specific guidelines developed jointly by the project partners, guaranteeing consistency across national contexts and alignment with the project's objectives.



Particular attention was paid to understanding the specific barriers encountered by first-time entrepreneurs, young people, and individuals with fewer economic opportunities, who often face additional challenges linked to limited financial resources, reduced access to professional networks, and lack of tailored information or mentorship. The findings presented in this report aim to support the development of targeted and practical measures to foster entrepreneurship and improve support systems across the participating countries and their respective rural regions. Rather than offering abstract recommendations, the research seeks to ground proposals in the actual experiences of entrepreneurs and VET learners, ensuring that future actions respond directly to the needs identified.

2 BARRIERS TO ENTREPRENEURSHIP

2.1 GENERAL OBSTACLES FOR ASPIRING ENTREPRENEURS

Aspiring entrepreneurs in Italy, Lithuania, Portugal, and Germany encounter a range of barriers that affect their ability to start and grow businesses, although the nature and intensity of these obstacles differ according to national contexts.

Access to finance remains a widespread challenge. In Italy and Portugal, entrepreneurs face significant difficulties securing funding due to risk-averse banking sectors and limited venture capital availability, especially outside major urban areas. In Italy, stringent lending criteria mean that only 28% of new businesses manage to obtain bank loans, forcing the majority to rely on personal savings or family networks. Similarly, in Portugal, startup costs and strict lending standards discourage new business initiatives. Lithuania presents a slightly more favourable environment, with a growing number of government-backed programs and business incubators, although access to capital remains limited in rural areas. According to the findings presented in the German report, access to venture capital is also restricted, particularly for startups and for those transitioning from startup to growth phases.

Bureaucracy and regulatory complexity are major hurdles in all four countries. Italian entrepreneurs must navigate extensive administrative procedures, with processes such as obtaining construction permits taking significantly longer than the OECD average. Portugal, despite initiatives like "Empresa na Hora," still struggles with regional variations in regulations that create uncertainty. Lithuania offers a more streamlined system, with online registration enabling company creation within a day, though tax complexities persist. In Germany, bureaucratic processes are a major



burden, consuming significant time and financial resources, with startups spending around one-fifth of their working time on administrative compliance.

Cultural and societal factors also play a critical role in shaping entrepreneurial activity. A strong risk aversion exists in Italy, Portugal, and Germany, where fear of failure remains a major deterrent. Entrepreneurship is often viewed as an unstable and insecure career path, especially among VET learners in Germany, who express concerns about irregular incomes, long working hours, and lack of clear support pathways. Lithuania shows a more dynamic entrepreneurial culture, particularly in urban and tech-driven sectors, although rural areas remain more conservative and risk-averse.

Education systems across countries demonstrate varying levels of support for entrepreneurship. In Germany, entrepreneurship education is largely limited to specific vocational tracks focused on business and economics, leaving most VET learners without exposure to entrepreneurial skills. Similarly, in Italy and Portugal, while higher education institutions have integrated entrepreneurship into curricula, primary and secondary education systems still lack strong practical entrepreneurship components. Lithuania offers broader support, with universities actively promoting startup initiatives and training programs, although gaps persist in providing practical, hands-on experience, particularly outside urban centres.

Other notable barriers include the visibility and accessibility of advisory services. In Germany, interviews with learners revealed a widespread lack of awareness about existing startup advisory programs. Portugal and Italy face similar issues, with limited mentorship opportunities and fragmented support networks, especially in rural or less economically developed regions. Lithuania performs relatively better in this respect, with national initiatives like Startup Lithuania providing structured support, although access to networks remains uneven across the country.

All four countries share persistent challenges around financing, bureaucratic processes, cultural attitudes toward risk, and gaps in education and mentoring systems. These obstacles suggest the need for coordinated efforts to reduce administrative burdens, expand access to finance, strengthen entrepreneurial education, and foster a cultural shift toward accepting failure as part of the business creation process.



2.2 GENDER-SPECIFIC OBSTACLES

Across Italy, Lithuania, Portugal, and Germany, female entrepreneurs face systemic barriers that differ in scope but converge around persistent issues of access to finance, cultural expectations, and structural inequalities.

Access to financing remains a major obstacle in all four countries. In Italy, women are significantly less likely to secure venture capital or bank loans, a trend mirrored in Portugal and Germany. In Italy, women-led businesses attract a fraction of venture capital investment, with cultural biases reducing the credibility of female business pitches by 20%. Similarly, in Portugal, women-led companies receive only 8% of total venture capital funding, and German female founders experience clear discrimination both in loan terms and in venture capital allocations, where male-only teams secure most investments. In Lithuania, although entrepreneurship is encouraged, unconscious biases in the investment community still limit women's access to growth capital, forcing many to rely on personal savings.

Cultural and societal factors reinforce these economic disparities. Traditional gender roles in Italy, Portugal, and Germany continue to assign caregiving responsibilities primarily to women, restricting the time and flexibility needed for business activities. In Italy, poor childcare infrastructure exacerbates the problem, while in Portugal, women still spend significantly more time on unpaid domestic work compared to men. Germany also faces persistent cultural biases that deter women from entrepreneurial careers and paint entrepreneurship as incompatible with family responsibilities. In Lithuania, traditional expectations are somewhat less entrenched, particularly in urban areas, but rural regions maintain more conservative views that limit women's entrepreneurial opportunities.

Mentorship and networking gaps are another recurring issue. Italian, Portuguese, and Lithuanian women report limited access to professional networks and a lack of visible female role models, which restricts opportunities for guidance and support. In Germany, the situation is similar, with few tailored advisory services available and female founders often isolated from mainstream startup ecosystems.

Structural initiatives to support female entrepreneurs exist but show mixed effectiveness. Italy's "Fondo Impresa Femminile" aims to promote women's entrepreneurship but faces low uptake due to bureaucratic barriers and poor outreach, particularly in regions like Sardinia. Portugal has launched programs under the "Startup Portugal" framework, but many women entrepreneurs still find it difficult to navigate these resources or meet eligibility requirements. Germany's ecosystem



offers formal support structures, yet deeply rooted biases and societal expectations continue to limit their impact. Lithuania provides a relatively more accessible business environment for women, but practical barriers related to family-work balance and access to capital remain unresolved.

Overall, while initiatives aimed at promoting female entrepreneurship have expanded across all four countries, systemic financial, cultural, and structural barriers continue to restrict women's full participation in the entrepreneurial landscape. Progress will depend on addressing not only economic inequities but also deeply ingrained societal norms and institutional biases.

3 SUPPORT FOR ENTREPRENEURS

3.1 GOVERNMENT PROGRAMS AND INITIATIVES

Entrepreneurship support structures vary considerably across Italy, Lithuania, Portugal, and Germany, with each country adopting a mix of financial incentives, mentoring programs, and targeted initiatives to foster business creation. Despite a broad range of available programs, common challenges around accessibility, outreach, and effectiveness remain.

Italy's support framework is centred around government-led initiatives tied to the National Recovery and Resilience Plan (PNRR). Programs such as Smart & Start Italia and Nuove Imprese a Tasso Zero offer grants and interest-free loans, especially targeting startups and female entrepreneurs. Specific initiatives like the Fondo Impresa Femminile were launched to promote women's entrepreneurship, while regional programs such as Resto al Sud aim to encourage youth entrepreneurship in less-developed areas. However, complex eligibility criteria, bureaucratic delays, and low public awareness limit the effectiveness of these initiatives. Evaluations show that only a small share of eligible applicants successfully access funds, highlighting the gap between policy design and real-world implementation.

Lithuania presents a relatively dynamic landscape for entrepreneurship support, particularly through initiatives like Women Go Tech and WOW University. The country also benefits from efficient administrative procedures for business registration and a growing network of incubators and accelerators. However, implicit biases in financing and structural cultural norms still limit broader participation in entrepreneurship, particularly outside urban centres.

Portugal's support system combines strategic frameworks like Portugal 2030 and Startup Portugal with specific financial incentives, grants, and tax benefits aimed at encouraging both domestic and



foreign entrepreneurship. Programs like Startup Voucher and Incubation Valley provide financial support and incubation services to early-stage businesses. The country also emphasizes female entrepreneurship through initiatives like the FAME Programme, EWA Programme, and the Inspiring Women Early-Stage Investors Project. Despite these efforts, entrepreneurs continue to face challenges related to navigating administrative complexity and accessing tailored mentorship services, particularly in rural areas.

Germany offers a stable but highly formalized support environment, with initiatives such as the EXIST Start-up Scholarship providing significant backing for university-based startups. Tax regulations such as the small business VAT exemption aim to ease the early administrative burden. Digital resources like the Gründerplattform offer structured support in business planning and financing access. There are recognised regional, sector-specific networks in the area of the German project partner, such as the UV Young Entrepreneurs Network and the UV Women's Network, which promote targeted networking opportunities for emerging entrepreneurs. However, bureaucratic hurdles, lack of visibility for advisory services at the VET level, and regional disparities in startup ecosystem development continue to limit the reach and impact of available support, particularly outside major urban centres.

3.2 TRAINING AND EDUCATION PROGRAMS

In Italy, entrepreneurial education remains fragmented and uneven. While around 60% of universities offer entrepreneurship-related courses, only a small proportion embed practical components such as incubators or pitch competitions. Access remains heavily concentrated in elite institutions like Bocconi and LUISS, limiting reach to students from rural or economically disadvantaged backgrounds. At the VET level, entrepreneurship is introduced sporadically through project-based initiatives rather than systematically integrated into curricula. Mobile learning solutions, such as the Fondazione Golinelli's STEM Caravan in Sardinia, demonstrate promising models for reaching underserved populations, but they remain isolated cases. Basic business software proficiency remains low among VET graduates, highlighting gaps in preparing learners for modern market demands.

Lithuania has built a comparatively stronger system for entrepreneurship education across all levels. VET programs routinely include entrepreneurship modules covering business planning, marketing, and financial management. Universities such as Vilnius University and Kaunas University of Technology offer dedicated entrepreneurship specializations and maintain active startup incubators



and accelerators to provide hands-on experience. Online education platforms, including Lithuanian initiatives like Turing College, have expanded access to entrepreneurial training beyond traditional classroom settings. Lithuania's education system also makes conscious efforts to address gender disparities through programs that support women's participation in entrepreneurial fields, though challenges persist, especially in traditionally male-dominated sectors.

In Germany, entrepreneurship training is concentrated almost exclusively within vocational programs focused on business and economics, with other VET fields largely excluding entrepreneurship content. Learners at business-focused vocational schools engage in coursework covering business plans, marketing, and legal structures, but opportunities remain limited for broader VET populations. At university level, entrepreneurship education is more robust, particularly through initiatives like the *Center for Entrepreneurship* at the University of Rostock, which supports students throughout the startup development process. Gender-specific support initiatives exist, mainly targeting university students rather than VET learners. Despite these efforts, the narrow focus of entrepreneurship education and the limited reach across vocational sectors restrict the broader development of entrepreneurial skills.

Portugal offers a more diversified approach, integrating entrepreneurship education across VET programs, higher education, and non-traditional learning formats. Institutions such as the Universidade de Lisboa and Nova SBE offer comprehensive entrepreneurship and innovation programs at undergraduate and postgraduate levels. Initiatives like the European Innovation Academy provide intensive online training focused on innovation and business development. Portugal also promotes gender equality in entrepreneurship education through programs such as the *FAME Programme* and the *Empowering Women in Agrifood (EWA) Programme*. Regional initiatives, like the *PEEBA project* in the Alentejo region, aim to instill entrepreneurial skills from an early age by training students and teachers, demonstrating a strong commitment to fostering entrepreneurial mindsets across different age groups and socioeconomic backgrounds.

4 ROLE MODELS AND BEST PRACTICES

4.1 LOCAL ROLE MODELS IN ENTREPRENEURSHIP

Local entrepreneurial role models play an essential part in shaping aspirations, promoting innovation, and fostering a supportive environment for new business creation across Italy, Lithuania,



Portugal, and Germany. Each country demonstrates how individual success stories can influence entrepreneurial ecosystems both locally and internationally.

In Italy, Sardinia has emerged as a fertile ground for community-driven entrepreneurship. Entrepreneurs like of Relicta have demonstrated how aligning business missions with environmental goals, in their case, converting fish industry waste into biodegradable bioplastics, can mobilize community support and attract investment. Similarly, *Treballu* project illustrates how coliving and coworking spaces can revitalize rural areas by integrating remote workers into local communities. These ventures successfully leverage local resources, public funding programs like *Resto al Sud*, and storytelling to build resilient, purpose-driven businesses. Initiatives like *NODI* and *ITACA* podcast also show how connecting local and global communities can create valuable knowledge-sharing networks and foster sustainable development.

Lithuania's entrepreneurial landscape is marked by successful female entrepreneurs who have shaped national and international markets. The company *Walk15* stands out for its focus on sustainability and health innovation, having gained recognition in the Deloitte Technology Fast 50 Central Europe 2023 rankings. The co-founder of *Vinted*, has led one of Lithuania's most successful startups, establishing a global presence in the second-hand fashion market. These examples underscore the importance of innovation, sustainability, and international ambition in Lithuania's growing entrepreneurial sector.

Portugal also benefits from prominent entrepreneurial figures who have contributed to both technological innovation and corporate leadership. The co-founder of *Talkdesk*, achieved unicorn status with her company, bringing international attention to Portugal's startup ecosystem. In the technology sector. Paula Amorim, a leading business figure, exemplifies female leadership in traditionally male-dominated sectors, ranking first on Forbes' 2023 list of the 50 most powerful women in Portuguese business. These figures highlight the diversity of sectors, from tech startups to corporate leadership, where Portuguese entrepreneurs have achieved significant impact.

In Germany, Sally Özcan has become one of the most influential entrepreneurial figures in the digital content and food industries. A former elementary school teacher, she launched *Sallys Welt* ("Sally's World") as a YouTube hobby channel focused on cooking and baking. It has since grown into Germany's most successful digital food content company, employing over 100 people. Her story exemplifies how content-driven entrepreneurship can evolve from informal creative expression into a scalable business model with national reach and influence.



These role models serve not only as symbols of entrepreneurial success but also as catalysts for cultural change. By promoting sustainability, leveraging digital platforms, revitalizing traditional sectors, and fostering inclusive networks, these entrepreneurs demonstrate accessible pathways for aspiring founders. Scaling their influence depends on structural support, particularly in rural and underserved areas, to ensure their stories inspire and inform the next generation of entrepreneurs.

4.2 BEST PRACTICES IN ENCOURAGING ENTREPRENEURSHIP

Italy, Lithuania, Portugal, and Germany have each developed distinct strategies and best practices to strengthen their entrepreneurial ecosystems. Despite differences in scale and focus, successful models across these countries share common elements: promoting collaboration, enhancing educational opportunities, building supportive networks, and addressing regional disparities.

In Italy, Sardinian entrepreneurs have demonstrated how community-driven business models can revitalize rural areas. Projects like Relicta and Treballu illustrate the power of integrating local resources with broader economic trends such as sustainability and remote work. Leveraging regional funding programs like Resto al Sud has been instrumental in supporting startups in underdeveloped areas. Additionally, initiatives like NODI and the ITACA podcast foster valuable local-global connections, enabling knowledge transfer and collective community development. However, systemic barriers such as bureaucratic complexity and limited access to infrastructure continue to challenge scalability.

Lithuania's entrepreneurial ecosystem is characterized by strong collaboration between public institutions, private businesses, and universities. Innovation hubs like Vilnius Tech Park and programs such as the Innovation Voucher Program have provided startups with mentorship, office space, and access to research expertise. Events like the Startup Fair and initiatives such as Kaunas IN Startups actively build networking opportunities, while business mentorship platforms offer critical guidance to early-stage entrepreneurs. Lithuania has also made significant efforts to integrate entrepreneurship into VET and higher education, launching programs specifically aimed at female entrepreneurs, such as WOW University, which improve access to finance, mentorship, and leadership opportunities.

Portugal's ecosystem benefits from extensive public-private cooperation. National initiatives like Startup Portugal and support from organizations such as IAPMEI have expanded the number of incubators, accelerators, and support structures available to entrepreneurs. Entrepreneurial education is strongly embedded at multiple levels, from VET programs to universities like Nova SBE



and Universidade de Lisboa. Targeted programs such as the FAME Programme and Empowering Women in Agrifood promote gender equality in entrepreneurship. Regional development agencies, notably ADRAL in Alentejo, show how integrating entrepreneurship into local economic strategies can stimulate rural development and diversification, particularly in agriculture and renewable energy.

In Germany, small-scale entrepreneurs in the city of Parchim highlight how local retail and services can become anchors of community engagement and social cohesion. Tilo Tambach, owner of the bookstore Rein(ge)lesen, has created more than just a shop, his space offers books, regional products, events, and cultural enrichment. The bookstore was called in the Nordkurier as "the heart of the town," a testament to its role in both the local economy and civic life. Similarly, photographers Therese Kietzmann and Lisa Massow founded Lisa und Theresa Fotografie, a studio deeply embedded in local life. Beyond commercial photography, they actively support community initiatives and provide services to volunteers. Another example is Mohamad Alsaadi, who arrived as a refugee in 2018 and founded ALSAADI, a specialty grocery store. What began as a small shop evolved into a thriving business offering hot meals and catering, bridging cultural tastes and creating economic opportunities for his family and community.

5 NEEDS OF VET LEARNERS

5.1 SKILLS AND KNOWLEDGE GAPS

VET learners in Italy, Lithuania, Portugal, and Germany face persistent gaps that undermine their ability to transition into entrepreneurship, despite efforts to strengthen technical education. In Italy, vocational education focuses heavily on traditional trades but offers limited training in entrepreneurship, financial literacy, and digital skills. Surveys by Unioncamere and ISFOL indicate that over 60% of VET learners feel unprepared to start a business, while proficiency rates in key areas such as digital literacy (34%) and financial management (29%) remain low. Regional inequalities, especially in southern regions like Campania, widen the gap, where schools prioritize theoretical instruction over practical business simulations. Fear of failure, reported by 68% of VET students, is closely tied to the lack of real-world exposure during training.

Lithuanian VET programs integrate entrepreneurial components more systematically, yet significant challenges persist. Learners often lack access to live business environments and face difficulties developing strategic planning skills, market analysis, and financial management knowledge. Technical skills in traditional fields are strong, but digital competencies related to e-commerce, online



marketing, and compliance with EU regulations are unevenly addressed. Soft skills such as critical thinking, resilience, and communication also require stronger integration into VET curricula to better prepare learners for entrepreneurial activities.

In Germany, VET learners outside business-focused tracks encounter a complete absence of entrepreneurship training. Skills like writing business plans, financial management, adaptability, and communication are consistently underdeveloped. Interviews confirm that existing advisory services and entrepreneurship mentoring programs rarely consider VET learners as a core target group. As a result, even well-trained technical graduates often lack the basic economic and strategic knowledge needed to establish or grow a business.

Portugal's situation reflects strong regional contrasts. In Lisbon, learners benefit from proximity to an active startup ecosystem but still experience gaps in financial literacy, strategic business planning, and access to business networks. In regions like Alentejo, entrepreneurship education remains tied to traditional sectors such as agriculture, with limited focus on digital skills or broader market strategies. Programs like PEEBA have improved exposure to entrepreneurial thinking, but confidence, creativity, and business readiness remain significant challenges for VET graduates.

While each country faces distinct challenges, common deficits in financial skills, digital competencies, entrepreneurial mindset, and practical exposure limit the entrepreneurial potential of VET learners. Expanding access to real-world entrepreneurial experiences, embedding entrepreneurial training across all sectors, and strengthening regional support systems would be crucial steps toward addressing these persistent gaps.

5.2 GENDER-SPECIFIC NEEDS IN VET

Female VET learners in Italy, Lithuania, Portugal, and Germany encounter specific barriers that limit their entrepreneurial ambitions. Although some initiatives address these challenges, stronger, better-targeted actions are needed to build inclusive pathways into entrepreneurship.

In Italy, gender stereotypes remain deeply embedded in vocational pathways. In southern regions, 80% of female apprentices train in hospitality-related fields compared to only 5% in engineering. Limited exposure to female role models, lack of entrepreneurial mentorship, and societal expectations reinforce gendered career choices. Proposals such as mobile STEM labs (*STEM Caravans*) aim to spark early interest in non-traditional sectors. Tailored guidance, emotional resilience training, and integrating risk-tolerance modules into VET curricula could strengthen



women's confidence and entrepreneurial readiness, particularly in underrepresented fields like technology and engineering.

Lithuania has outlined concrete strategies to close the gender gap in entrepreneurship training. Building mentorship networks for women, introducing leadership courses focused on self-promotion and negotiation, and offering targeted financing information are considered essential. Programs promoting women's participation in male-dominated industries like IT and construction, combined with campaigns highlighting successful female entrepreneurs, could encourage broader engagement. Networking platforms specifically for women would further help female VET learners expand their professional connections and access resources critical to launching businesses.

The report from Germany highlights the need to strengthen the position of women within the VET system. This could be supported by promoting broader perceptions of entrepreneurship, increasing the visibility of female role models, and fostering partnerships with networks for female entrepreneurs. Financial education and pitch training, specifically aimed at strengthening negotiation skills and resilience, would equip female learners to better navigate business financing environments. Tailoring entrepreneurship education toward sectors with high female participation, such as retail, care work, and education, would also ensure greater reach and relevance.

The report from Portugal highlights that Portugal has made progress, but significant gaps remain, especially outside major urban centers. Expanding mentorship programs modeled on initiatives like *Women in Tech Portugal* could provide female VET learners with critical support and role models. Entrepreneurship training needs to be more systematically include leadership development, risk-taking skills, and financial literacy. Programs targeting women in regions like Alentejo could build entrepreneurial confidence by challenging traditional gender roles and promoting assertiveness and strategic thinking. Improved access to gender-sensitive financing workshops, women-led startup incubators, and flexible learning formats would also be crucial, particularly in rural areas where balancing family and business responsibilities poses a greater challenge.

While the specifics differ across countries, recurring needs include mentorship, targeted leadership training, stronger financial education, and more visible pathways into entrepreneurship for women. Addressing these gaps will require not just standalone initiatives but deeper integration of gender-sensitive strategies across VET systems.



6 STRATEGIES TO STRENGTHEN LEARNERS IN ENTREPRENEURSHIP

6.1 SUPPORTING ASPIRING ENTREPRENEURS

Efforts to strengthen entrepreneurship among VET learners and aspiring entrepreneurs across Italy, Lithuania, Portugal, and Germany focus on bridging systemic gaps, increasing access to real-world business experiences, and fostering more inclusive entrepreneurial ecosystems.

In Italy, improving the entrepreneurial landscape requires simplification of funding access, embedding entrepreneurship education into VET curricula, and scaling gender-specific interventions. Digital platforms that guide applicants through funding schemes, combined with financial literacy training in VET, could boost participation in existing support programs. National reforms are needed to systematically integrate entrepreneurship, digital innovation, and project-based learning across VET institutions. Targeted incentives for women-led startups, combined with accessible childcare and flexible work solutions, are key to promoting gender equity. Addressing regional disparities remains critical, especially through investments in infrastructure and support hubs in the south. A coordinated national task force involving ministries, VET providers, and private actors could reinforce peer learning and improve the outreach of entrepreneurial initiatives.

Lithuania emphasizes aligning educational offerings with real market needs through initiatives tied to the *Lithuania 2030* strategy and the *National Progress Program 2021–2027*. Collaboration between universities, VET schools, and local businesses strengthens students' exposure to practical entrepreneurship. Innovation hubs, startup incubators, internships, and mentorship programs sponsored by businesses have become core elements in building a competitive entrepreneurial ecosystem. The government's active support through platforms like Startup Lithuania and events like the Startup Fair creates bridges between emerging entrepreneurs, investors, and international markets. A focus on balancing urban and rural opportunities aims to decentralize entrepreneurship support across the country.

Germany's efforts highlight the importance of gender-sensitive interventions. Modular entrepreneurship leadership programs, expanded mentorship networks, flexible learning formats, and blended education approaches, particularly offering childcare support, are seen as effective strategies. Success depends on the creation of monitoring frameworks that measure the long-term



entrepreneurial engagement of female learners, especially in emerging sectors like the green economy, ICT, and culture-based tourism.

Portugal's model focuses heavily on integrating practical experience into education through business simulations, internships, and entrepreneurship competitions. VET institutions, particularly in Lisbon and Alentejo, collaborate closely with local businesses to provide hands-on entrepreneurial experiences, mentorship, and incubation support. Programs like Junior Achievement Portugal and partnerships with hubs like StartUp Lisboa give students opportunities to engage directly with the entrepreneurial process. In rural areas, initiatives like Alentejo Digital Hub provide access to digital tools and mentoring. Entrepreneurship competitions and targeted female initiatives, such as Women in Tech Portugal, further promote entrepreneurial skills, innovation, and gender inclusion.

Common across all four countries is the recognition that entrepreneurial education must move beyond technical training. Practical exposure, financial literacy, targeted gender support, collaboration with businesses, and the creation of strong regional ecosystems are fundamental strategies to nurture the next generation of entrepreneurs. Sustained investment in decentralized, inclusive, and experiential learning models will be essential for long-term impact.'

6.2 GENDER-SPECIFIC STRATEGIES

Supporting female entrepreneurs within VET systems in Italy, Lithuania, Portugal, and Germany requires targeted strategies that address structural inequalities, challenge gender stereotypes, and offer practical tools and networks to build entrepreneurial capacity.

In Italy, particularly in Sardinia, female learners face cultural barriers and a lack of supportive infrastructure. Addressing these challenges calls for modular entrepreneurship leadership programs focused on digital competence, financial literacy, negotiation, and local case studies of successful women entrepreneurs. Expanding formal mentorship networks that connect female learners with business owners in sectors like agro-tourism and sustainable crafts can provide much-needed role models. Offering flexible learning formats, such as evening and hybrid courses coupled with childcare support, would make entrepreneurial training more accessible. Evaluating success through long-term measures of entrepreneurial engagement, especially in sectors like green economy and ICT, would ensure greater gender inclusivity.

Lithuania's approach focuses on redesigning VET curricula to include entrepreneurial courses tailored to the needs of women. Key additions should include leadership training, overcoming gender



biases, negotiation skills, and resilience-building. Structured mentorship programs with successful women entrepreneurs, along with dedicated networking events, would help female learners develop essential professional connections. Practical internships and collaborations with incubators focused on supporting women would offer real-world experience. Financial literacy training tailored to the needs of female entrepreneurs is critical, as is the provision of flexible schedules and childcare to facilitate participation among women with family responsibilities.

The report from Germany highlights the need to move entrepreneurship education beyond male-dominated fields and make it accessible across all VET sectors. Challenging gender stereotypes within the education system, expanding entrepreneurship training into fields with higher female enrolment, and integrating communication skills, pitch training, and financial education would significantly strengthen female learners' entrepreneurial potential. Projects linking VET learners to female entrepreneurship networks could improve access to industry knowledge, mentorship, and financing opportunities.

The report from Portugal emphasizes the importance of a comprehensive strategy to create a more inclusive VET environment. Integrating gender-sensitive entrepreneurship modules into curricula would directly address barriers such as access to finance, overcoming biases, and balancing work-family responsibilities. Building visible female-focused mentorship programs and regional support networks, particularly in rural areas like Alentejo, would counter isolation and foster peer support. Financial literacy workshops tailored to women, alongside partnerships with investors and financial institutions, would strengthen female entrepreneurs' access to funding. Flexible learning formats and childcare support are essential to accommodating learners' needs, particularly for those balancing family responsibilities. Finally, linking female learners to broader entrepreneurial ecosystems through incubators, accelerators, and competitions would ensure women are actively represented and supported in entrepreneurship initiatives.

Each country highlights the importance of embedding gender-specific strategies within the broader VET reforms, ensuring that female learners are not only equipped with entrepreneurial skills but also empowered to overcome systemic barriers. Scaling mentorship, improving financial education, challenging stereotypes, and creating supportive networks are crucial to making entrepreneurship a viable and attractive path for women across different regions and sectors.



7 RECOMMENDATIONS FOR FUTURE PROGRAMS

7.1 SUGGESTIONS FOR NEW TRAINING APPROACHES

Modernizing entrepreneurial training for VET learners requires moving beyond theory toward hands-on, context-driven, and inclusive approaches. Italy, Lithuania, Germany, and Portugal each present clear pathways to making entrepreneurship education more effective and relevant.

In Italy, entrepreneurial training needs to become more integrated with regional economic development. Micro-entrepreneurship labs in Sardinia focusing on sectors like sustainable agriculture, digital tourism, and food innovation would offer learners practical, place-based business experiences. Partnerships with research centres such as Sardegna Ricerche would strengthen these initiatives. Embedding project-based learning into curricula, including exercises like creating business plans for rural revitalization, would sharpen critical thinking and digital skills. Introducing short-cycle qualifications in business management, marketing, and renewable energy would provide VET learners with nationally recognized credentials aligned with labour market needs. Regional exchange programs linking learners from industrial hubs like Milan with traditional artisans in Sardinia could further foster innovation and help bridge regional economic divides.

Lithuania would benefit from entrepreneurship programs that blend business fundamentals with digital skills development. Training modules should cover financial literacy, business planning, customer relationship management, and social media marketing to meet evolving market demands. Real-world case studies, workshops led by local entrepreneurs, and mentorship schemes linked to Lithuania's startup communities would strengthen the practical relevance of VET education and help build professional networks essential for entrepreneurial success.

Germany's approach should reinforce practical entrepreneurial training across all VET sectors, not just those traditionally associated with business. Core components should include writing business plans, understanding legal forms, financial management, identifying financing options, and building entrepreneurship networks. Project-based learning and business simulations would allow learners to test real-world business scenarios. Setting up school companies could also serve as a practical tool, providing both financial support for school activities and real management experience. Training



should further emphasize resilience, analytical skills, and communication, identified by entrepreneurs as critical for success.

Portugal needs a comprehensive reform of entrepreneurial education that integrates experiential learning, digital entrepreneurship, and strong collaboration with the local business community. Business simulations, case studies, entrepreneurial boot camps, and accelerator programs should become core elements of VET curricula. Learners must be equipped with digital skills for e-commerce, online marketing, and tech entrepreneurship. Building structured partnerships with businesses and entrepreneurs would offer mentorships, internships, and live project experiences. Programs focused on soft skills such as leadership, decision-making, and resilience are essential to complement technical knowledge. Gender-sensitive entrepreneurial training addressing specific barriers faced by women, alongside greater integration of online and blended learning solutions, would ensure broader access and flexibility, especially for rural and underserved groups.

A common thread across all countries is the need to connect entrepreneurial training more directly to real-world business practices, digital transformation, and inclusive support systems. This shift is essential to equip the next generation of VET learners with the tools to launch, grow, and sustain successful businesses in dynamic and diverse economies.

7.2 POLICY RECOMMENDATIONS

Removing barriers to entrepreneurship and creating an inclusive environment for aspiring entrepreneurs, especially women and VET learners, requires comprehensive policy action across Italy, Lithuania, Germany, and Portugal.

In Italy, simplifying business registration is a crucial first step. A single national digital portal could streamline procedures and serve as a pilot project in Sardinia, reducing administrative burdens and improving access to incentives. Public procurement rules should include mandatory quotas for women-led SMEs, particularly in sectors like cultural heritage, digital services, and education, where female entrepreneurship is strong but undercapitalized. At the education level, entrepreneurship modules highlighting female innovators should be embedded into the national VET curriculum. Fiscal incentives encouraging companies to hire former VET learners or women reentering the workforce after caregiving would make inclusion economically advantageous. A national observatory on female entrepreneurship should be created to track disaggregated data by gender, age, region, and sector, allowing for continuous policy improvement based on real evidence.



Lithuania should expand financial instruments available to startups by simplifying access to loans and grants through agencies like INVEGA and offering lower-interest loans for businesses in emerging sectors. Reducing early-stage tax burdens, particularly social security contributions for new employers, would ease the financial pressure on startups. To support women entrepreneurs, dedicated programs offering financial literacy training, mentorship, and targeted seed funding are needed, especially for underrepresented sectors and rural areas. These measures would strengthen Lithuania's entrepreneurial ecosystem by making funding more accessible, promoting innovation, and supporting diversity.

Germany should better recognize the role of startups in regional development. Policies must go beyond focusing only on innovation and digitalization to support businesses aiming to maintain rural economies. Financing options tailored for startups in rural areas, not just high-tech sectors, are needed to foster balanced economic growth across regions.

Portugal should address funding gaps by establishing low-interest loans, seed grants, and microcredit programs for startups, with a special focus on supporting women-led enterprises and rural entrepreneurs in areas like Alentejo. Streamlining bureaucracy through faster online registration and expanding digital infrastructure would make entrepreneurship more accessible nationwide. Policies promoting digital transformation, tax incentives for innovation, and the development of regional startup hubs are needed to boost entrepreneurial activity outside major cities. Targeted initiatives for women entrepreneurs should include gender-responsive financial tools, mentoring programs, female-focused incubators, and better childcare and work-life balance policies. Entrepreneurship education at all levels should be expanded, emphasizing practical experience, private-sector partnerships, and gender-sensitive training to close persistent gaps.

8 CONCLUSION

This research highlights both shared patterns and country-specific dynamics in fostering entrepreneurship among VET learners in Italy, Lithuania, Portugal, and Germany. Despite each country's progress in developing its entrepreneurial ecosystem, systemic barriers, particularly those linked to gender inequality, regional disparities, and educational gaps, continue to restrict equitable access to entrepreneurship. The research also identified key entrepreneurial skills needed by VET learners, including financial literacy, digital competencies, problem-solving, and networking. Recognizing these skill gaps is essential for shaping the project's training guide and educational



offerings, ensuring they are tailored to the real needs of learners and support inclusive entrepreneurial development across partner regions.

Italy, especially in Sardinia, illustrates how regional identity and social norms limit the entrepreneurial participation of women and youth. Yet, community-rooted initiatives and pilot programs show promise when supported by adapted VET curricula, accessible mentorship, and flexible learning options. Portugal has built strong public-private infrastructure but must go further to ensure that women and rural learners are fully integrated into the entrepreneurial landscape. Lithuania benefits from a digitally advanced environment and increasing youth engagement, though access to finance and targeted support for underrepresented groups remain insufficient. Germany's vocational education tradition provides a solid foundation, but it is essential to embed entrepreneurial thinking beyond business-focused training pathways. In addition, counteracting gender-specific perceptions, closing financing gaps, and reducing bureaucratic hurdles could contribute to strengthening rural regions.

One of the key cross-border findings of this transnational report is the clear need to integrate entrepreneurship education across all VET disciplines, not just within economic or business-oriented programs, while prioritizing experiential learning, digital literacy, and hands-on business planning. Gender-responsive policies and tailored training models are equally critical, as female learners continue to face structural disadvantages in accessing finance, mentorship, and recognition. Mentorship opportunities and the visibility of local role models must be expanded, particularly in rural and underserved areas, to nurture ambition and confidence among young entrepreneurs.

Moreover, place-based approaches are particularly effective: locally grounded entrepreneurship labs, digital business incubators, and training programs aligned with regional assets and traditions have demonstrated strong potential in regions like Sardinia and Alentejo. These must be coupled with stronger cross-sector coordination, where education providers, businesses, policymakers, and civil society actors work together to ensure that support systems are relevant, inclusive, and long-term.

Entrepreneurship should not be viewed merely as an individual career path but as a driver of economic resilience, social inclusion, and sustainable development. Along with educational reform, regional strategies, and inclusive policy design, countries can unlock the full entrepreneurial potential of VET learners, especially those historically left at the margins of opportunity.



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