Powered by AI: Unlocking SME Growth in the West

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This study was supported by:

Foreword

This work was initiated under embrAIsme, an Interreg Europe project focused on improving policies and programmes that support SME adoption of AI. The project brings together partners from Austria, Bulgaria, Finland, Spain, Ireland, Portugal and Slovenia to strengthen AI readiness and share learning across Europe. In Ireland, itag and the Western Development Commission (WDC) serve as the national project partners and this study was delivered in partnership with Regional Skills West and Atlantic Technological University (ATU).

1. Context

Artificial intelligence (AI) is transforming the manner small and medium-sized enterprises (SMEs) operate, compete and expand. The Artificial Intelligence Act of 2024 of the European Union has created a coherent set of rules regarding trustful AI, thus promoting responsible innovation, as well as tackling privacy, transparency, and ethics concerns. The national strategy of Ireland, which is named AI - Here for Good, follows this approach as it suggests human-centred and ethical use of artificial intelligence.

 This report Powered by AI: Unlocking SME Growth in the West, examines the ways in which SMEs in the West of Ireland are integrating AI, the obstacles they are encountering, and the resources they require to achieve success. It is a collaborative initiative between DFHERIS Regional Skills West and itag/EMBRAISME with the support of the Western Development Commission and implemented by Atlantic Technological University (ATU).

Our findings highlight that the majority of SMEs are open to using AI, and a significant number are already experimenting with AI tools, recognising that AI is not a distant concept but an enabler of efficiency, customer engagement, and innovation. Employers recognise that AI is not a distant concept but an immediate enabler of efficiency, customer engagement, and innovation. However, progress is uneven. Skill shortages, resource constraints and ambiguity in regulations are still holding back adoption. Business owners report that their needs range from accessible training and digital infrastructure to peer learning and policy clarity.

Smaller companies throughout the West can leverage AI with the appropriate training, financing, and clear policy to innovate and develop. Ensuring that such transformation is extended to all regions will be crucial to the future digital economy of Ireland. The report concludes with actionable recommendations for government agencies, education providers, and industry partners to accelerate AI readiness across the region. As the pace of technological change accelerates, the message is clear; SMEs in the West are ready to employ the power of AI, provided the right supports, partnerships and learning opportunities are in place. Together, we can ensure that the region not only adapts to the age of AI, but leads it.

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2. Methodology

This study used a mixed-methods approach to assess AI adoption among SMEs in the West of Ireland. First, an online survey was distributed to business owners and managers across sectors to capture quantitative insights on organisational demographics, current AI usage, barriers, skills gaps, training needs, and external support requirements. All scaled items used a 1–7 Likert format, where 1 indicated very low and 7 very high. See figure 1 for an overview of the respondents profile by industry sector. In the second phase, semi-structured interviews were conducted with SME representatives and regional stakeholders to explore in greater depth the themes emerging from the survey, including skills readiness, regulatory concerns, strategic motivations, and ecosystem supports. Combining these two phases allowed the research to link broad patterns of readiness with the lived experiences of firms and support agencies, ensuring a more grounded, contextual understanding of AI adoption in the region.
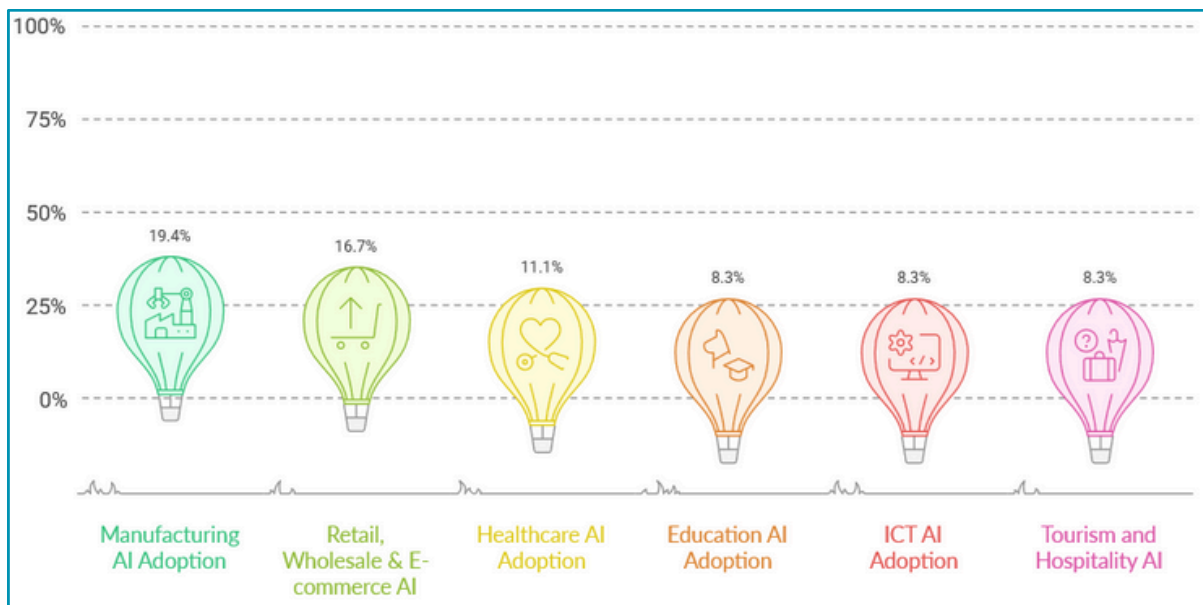

Figure 1. Respondents profile

3. Key Findings

3.1 AI Adoption & Awareness

The study shows that AI adoption among SMEs in the West of Ireland is already underway, with awareness levels rising steadily across sectors. Survey findings indicate that almost two-thirds of SMEs are either using AI tools or experimenting with them, suggesting that AI is no longer seen as a distant or specialised technology (see figure 2). Everyday tools such as ChatGPT, Copilot, Gemini and Claude have made AI visible and accessible, enabling SMEs to try it without technical integration or significant financial commitment. This has played a major role in widening awareness.
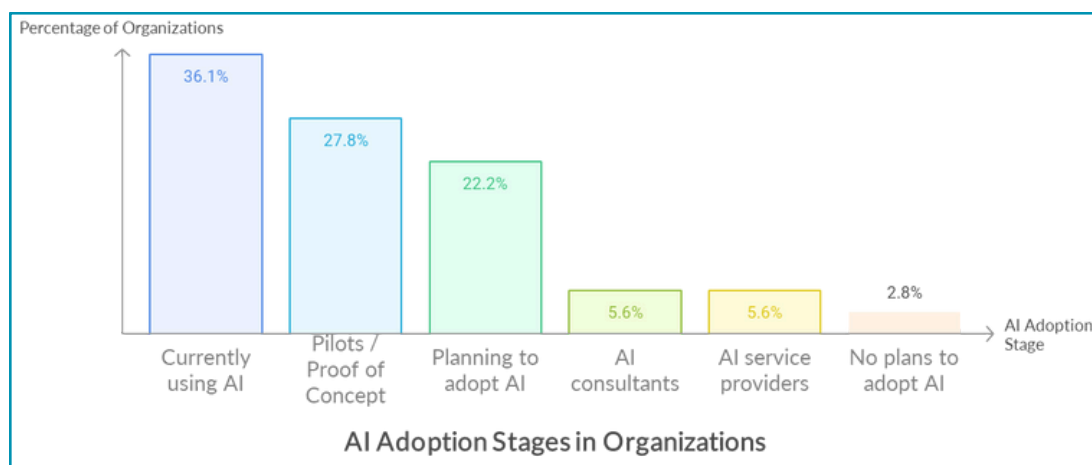

Figure 2. AI usage

Interviews reinforce this trend. SME owners described a shift over the past year from viewing AI as an abstract concept to seeing it as a practical resource. Many reported hearing about AI from peers, customers or staff members experimenting informally. Several interviewees noted that AI is now part of "day-to-day conversations" in their organisations, driven by curiosity and a recognition that competitors are beginning to adopt digital tools. However, awareness does not yet translate into strategic adoption. Interviews revealed that although SMEs understand AI's potential, they often remain unsure about how to apply it meaningfully within their business. The study found that many early adopters rely on ad-hoc experimentation rather than planned integration, and most have not yet developed structured approaches to data, workflows or staff training. Overall, the findings suggest a region that is highly aware of AI and increasingly engaged with it, but still at an early stage of structured adoption. SMEs recognise both the opportunities and the need for clearer guidance to move from experimentation to sustained use.

3.2 Barriers and Enablers to AI Adoption

While enthusiasm for AI is high, SMEs in the West face a common set of barriers (see figure 3). Skills gaps emerged as the most consistent barrier across both data sources. Survey responses indicate limited technical capacity, while interviews revealed the emotional dimension: confusion, overwhelm and fear of getting things wrong. Interviewees spoke about "not knowing where to start," lacking internal champions or being unsure if tools were used safely. Data readiness is another critical obstacle; SMEs described messy data, outdated systems and limited automation. The survey supports this, highlighting data as a limiting factor for over a third of respondents.

Regulatory uncertainty, particularly around the EU AI Act, shows strong alignment between quantitative and qualitative findings. Survey respondents rated regulatory clarity as one of their lowest-scoring external supports, while interviews frequently revealed anxiety about compliance. Several SMEs admitted to avoiding AI in certain tasks because they did not want to risk unintended breaches. Cost emerged strongly in the interviews; SMEs understand the benefits but struggle to justify investment without clear returns. The absence of mid-range funding further compounds this challenge.
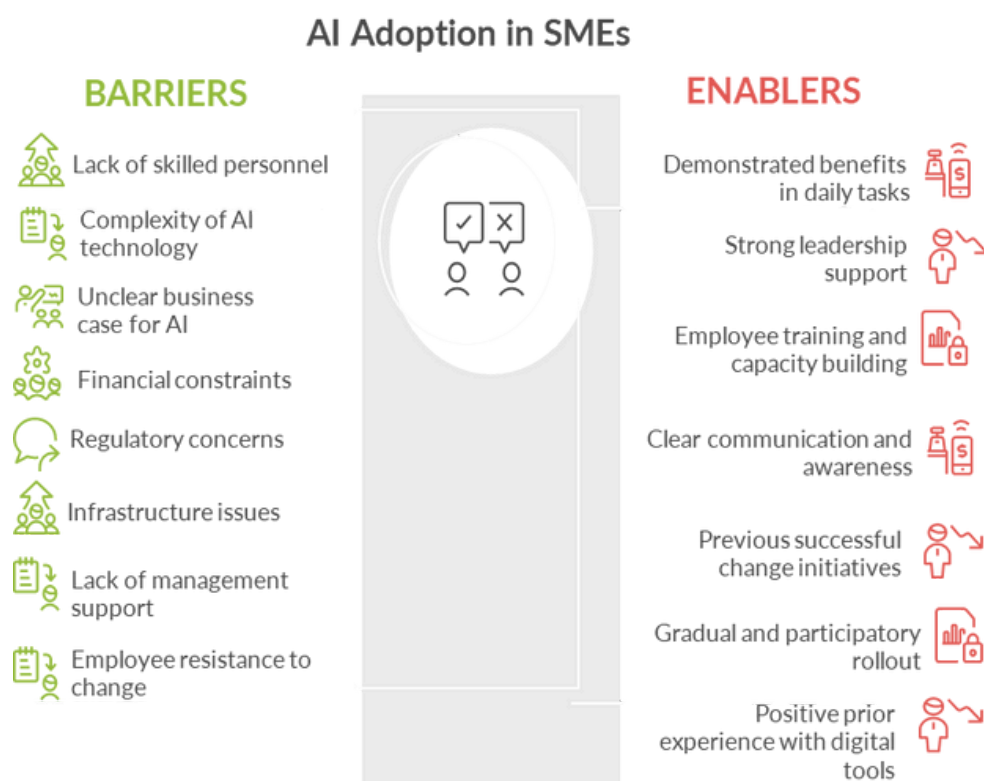

AI Adoption in SMEs

BARRIERS
- Lack of skilled personnel
- Complexity of AI technology
- Unclear business case for AI
- Financial constraints
- Regulatory concerns
- Infrastructure issues
- Lack of management support
- Employee resistance to change

ENABLERS
- Demonstrated benefits in daily tasks
- Strong leadership support
- Employee training and capacity building
- Clear communication and awareness
- Previous successful change initiatives
- Gradual and participatory rollout
- Positive prior experience with digital tools

Figure 3. Barriers and enablers of AI adoption

The survey also identified many positive aspects that promote the use of AI (see figure 3). The strongest enabler was demonstrated benefits of AI in daily tasks. This was closely followed by strong leadership support and employee training and capacity building, underscoring that both strategic commitment and workforce readiness are critical to adoption. Other important factors included clear communication and awareness programmes, previous successful change initiatives, and a gradual and participatory rollout, all of which reflect SMEs' preference for inclusive, structured change processes that build confidence and trust. Positive prior experience with digital tools was also noted, indicating that digital maturity helps create efficient conditions for AI integration.

The respondents feedback highlighted that successful AI adoption relies on strong leadership, visible daily results, and peer-based learning that builds confidence and practical skills. Moreover, several key informants stressed the importance of having a real show of AI benefits through demonstration projects. It was found more practical to have case-based learning instead of theoretical training. One of the respondents mentioned that AI adoption is the most common when leaders set an example and employees see tangible and immediate positive results. This indicates that adoption accelerates when teams witness tangible workflow improvements (e.g., faster documentation, summarisation, translation), reinforcing that "show-don't-tell" approaches are more effective than abstract training.

3.3 Skills and Training needs

The study shows a clear set of skill gaps that restrict SMEs from moving beyond initial experimentation with AI. Survey results reveal that many employees lack a basic understanding of AI concepts, with several respondents estimating that only a small proportion of their workforce can explain how AI tools function. Interviewees reinforced this, noting that staff often "don't know what's possible" and feel unsure about where to begin. A second major gap lies in data management, as many SMEs described their data as unstructured, inconsistent or spread across disconnected systems. Several business owners admitted that "our data wouldn't be ready for anything advanced." The study also identified gaps in task-specific AI skills, with SMEs unsure how to apply AI meaningfully to daily work. Finally, there is a strong gap in AI ethics and regulatory understanding, driven by uncertainty around the EU AI Act.

A central finding of the study is that SMEs in the West of Ireland require a combination of foundational and applied AI skills to move from experimentation toward meaningful adoption. Across both survey responses and interviews, businesses consistently emphasised that skills gaps, not technology, are their biggest obstacle. SMEs described this simply:

❝ People don't know what to do with AI beyond the basics. ❞

Basic AI Literacy
Many SMEs need a clearer understanding of what AI can and cannot do. Survey findings show that few staff have more than a basic grasp of AI's functions, and interviewees noted that misconceptions lead to hesitation. To address this, SMEs want short, accessible introductory sessions that explain core concepts using real examples. These sessions should demystify AI and help teams build confidence.

Data Management Skills
Poor data quality and fragmented systems limit AI's usefulness. Interviewees described their data as "messy" or "not in a state where AI can use it." SMEs therefore require training that teaches them how to structure, clean and manage data using simple, practical methods. They prefer hands-on workshops that apply directly to their own datasets.

Applied, Task-Focused Skills
SMEs want staff to learn how to use AI in everyday tasks such as summarising documents, generating communications, supporting reporting, or improving customer interactions. They favour short, scenario-based training that demonstrates "how AI helps with the work we already do."

AI Ethics and Regulatory Awareness
Uncertainty about the EU AI Act is a significant barrier. Businesses want clear, practical explanations of their obligations, delivered through short briefings that translate regulation into everyday language.

Technical and Integration Skills

Some SMEs are ready for more advanced use, especially in ICT or healthcare. These firms seek project-based training that shows how to integrate AI into existing systems, often delivered through mentoring or collaboration with experts.

Across all these areas, SMEs emphasise that training must be practical, short, and immediately usable, with a strong preference for learning through real business workflows.

3.4 External Supports & Regional Challenges

The study highlights that external supports play an important role in shaping how SMEs in the West of Ireland adopt AI, but it also shows that access to these supports can be uneven. Survey respondents recognised the value of financial incentives, training programmes, regulatory guidance and collaboration platforms, with many noting that these supports help reduce risk and provide reassurance when exploring new technologies. Interviews reinforced this, as SMEs described strong relationships with Local Enterprise Offices, Enterprise Ireland, universities and regional digital hubs. Many said that speaking with these organisations

❝made AI feel within reach ❞

especially when supports were practical and clearly explained. However, these strengths exist alongside notable regional challenges (see figure 4). The most consistent challenge is the fragmentation of the support ecosystem. SMEs often receive different messages depending on which organisation they approach, leaving some unsure where to start or who to trust. Stakeholders acknowledged this gap and stressed the need for stronger coordination across agencies. SMEs also identified infrastructure limitations, including inconsistent broadband quality in rural areas, which slows digital progress. A further regional challenge is the limited local talent pool, particularly outside major urban centres, creating pressure on SMEs that want to deepen their digital capability but struggle to recruit or access expertise.

Finally, SMEs highlighted low awareness and regulatory uncertainty as regional obstacles, with many worried about complying with the EU AI Act without clear guidance. These combined challenges mean that while supports exist, stronger alignment, clearer communication and expanded capacity are essential to ensure SMEs can benefit fully from regional and national AI initiatives.
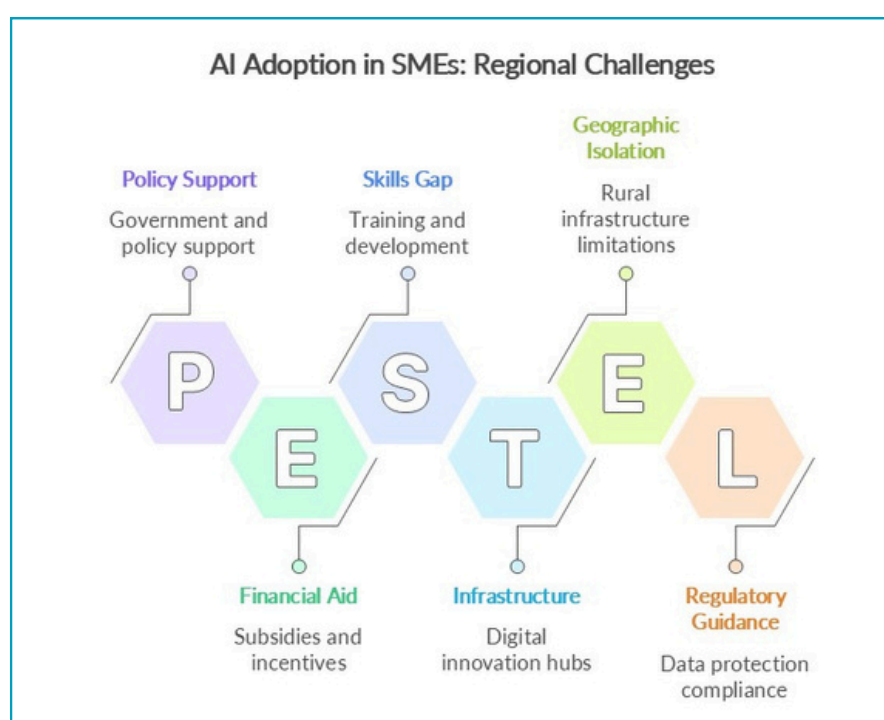

Figure 4. Regional challenges

3.5 Expected Benefits

SMEs across the West of Ireland express a clear and growing belief that AI can deliver meaningful and practical benefits for their organisations. Survey responses show strong confidence in AI's ability to improve operational efficiency, reduce administrative workload and streamline everyday processes (see figure 5). Many SMEs reported that even basic tools help them save time, produce higher-quality outputs and respond more quickly to customers. Interviewees echoed these sentiments, with several noting that AI "takes the pressure off" by handling routine tasks that previously consumed valuable staff time. Another expected benefit is improved decision-making. SMEs recognise that AI can analyse information faster than traditional methods and support more accurate planning, forecasting and reporting. Participants explained that AI helps them "make sense of data we were already collecting," turning information that was once underused into insights that guide strategy and resource allocation.

AI is also seen as a driver of customer engagement and service quality. Many respondents believe AI can help personalise communication, improve responsiveness and support more consistent customer interactions. In sectors such as healthcare, tourism and professional services, SMEs identified strong potential for AI to enhance the quality and speed of client-facing activities.

SMEs anticipate benefits in innovation. Both data sources show that AI is increasingly viewed as an enabler of new ideas, new services and new ways of working. As one interviewee put it, "AI gives us options we never had before," reflecting a wider expectation that AI will support long-term competitiveness and growth across the region.
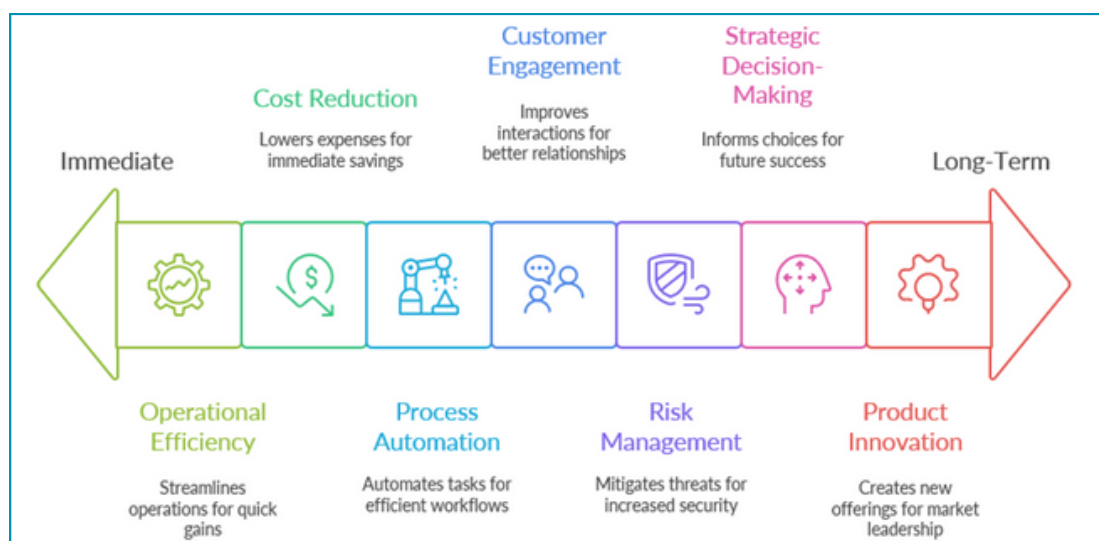

Figure 5. Expected benefits

The findings show that SMEs do not need complex systems to realise value and that even the small applications of AI have resulted in tangible changes in their working mechanisms. Most referred to it as creating hands-free time to concentrate on creativity and customer relations. Enterprises in the West of Ireland are demonstrating that AI need not be complicated and costly. Using easy to use tools that help in solving key issues in daily life, engaging the team at the onset and focusing on visible outcomes, the SMEs can attain gradual improvement, develop confidence and eventually redefine how their organisations function. Incremental, task-level applications can free up time, improve service responsiveness, and build momentum for deeper adoption. This reinforces the need for targeted demonstrations and practical examples tailored to SME contexts.

Case Highlights

The research provides real-life examples of how AI is already being used by small businesses in the West of Ireland in simple and yet powerful descriptions. These stories show that innovation often does not involve much investment, but curiosity, trial, and error, and a desire to learn.

Case 1: Healthcare SME – Streamlining Administration

A small healthcare company in started using ChatGPT to help with the summarisation of notes in patients and report writing. Before the advent of AI, employees were spending a number of hours every week in documentation and following up letters. The company used AI to create rough drafts which could be refined easily, this led to an estimated 5 hours per week saved in administration time. The owner mentioned that such efficiency enabled to concentrate more on communication with clients and the quality of services, but not on paperwork. The group has then embarked on experimentation in AI as an internal knowledge management tool and training material development (figure 6).
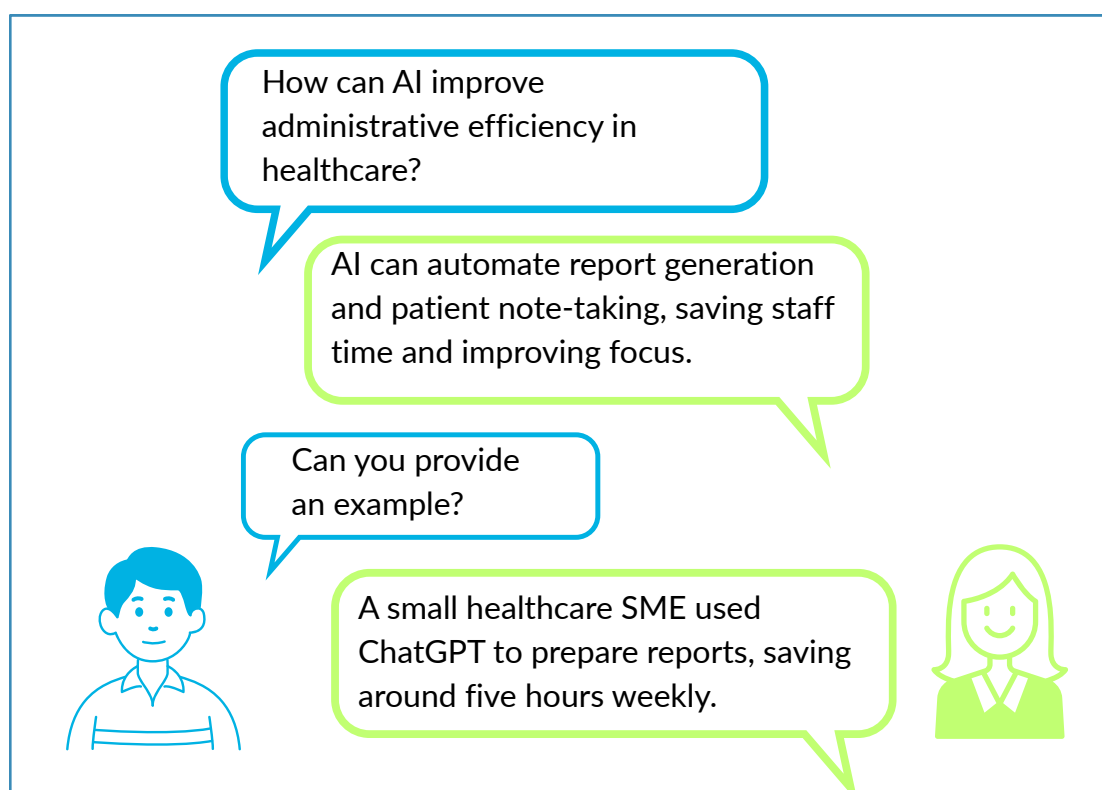

Figure 6. AI in Healthcare administration

Case 2: Retail SME – Expanding Market Reach

An example of a small retail and e-commerce company, operating out of Clare, tested AI translation tools on products description translation to convert them into European languages. In the past, the language barrier constrained the online presence outside Ireland. After the introduction of AI-assisted translation and image generation, the company was able to add new locations to its list on several marketplaces in the EU, where one could see a tangible effect on web traffic and cross-country sales. The founders have defined AI "like adding a marketing assistant overnight", where automated translations and better content quality enabled the company to access new audiences without incurring significant extra expenses (figure 7).
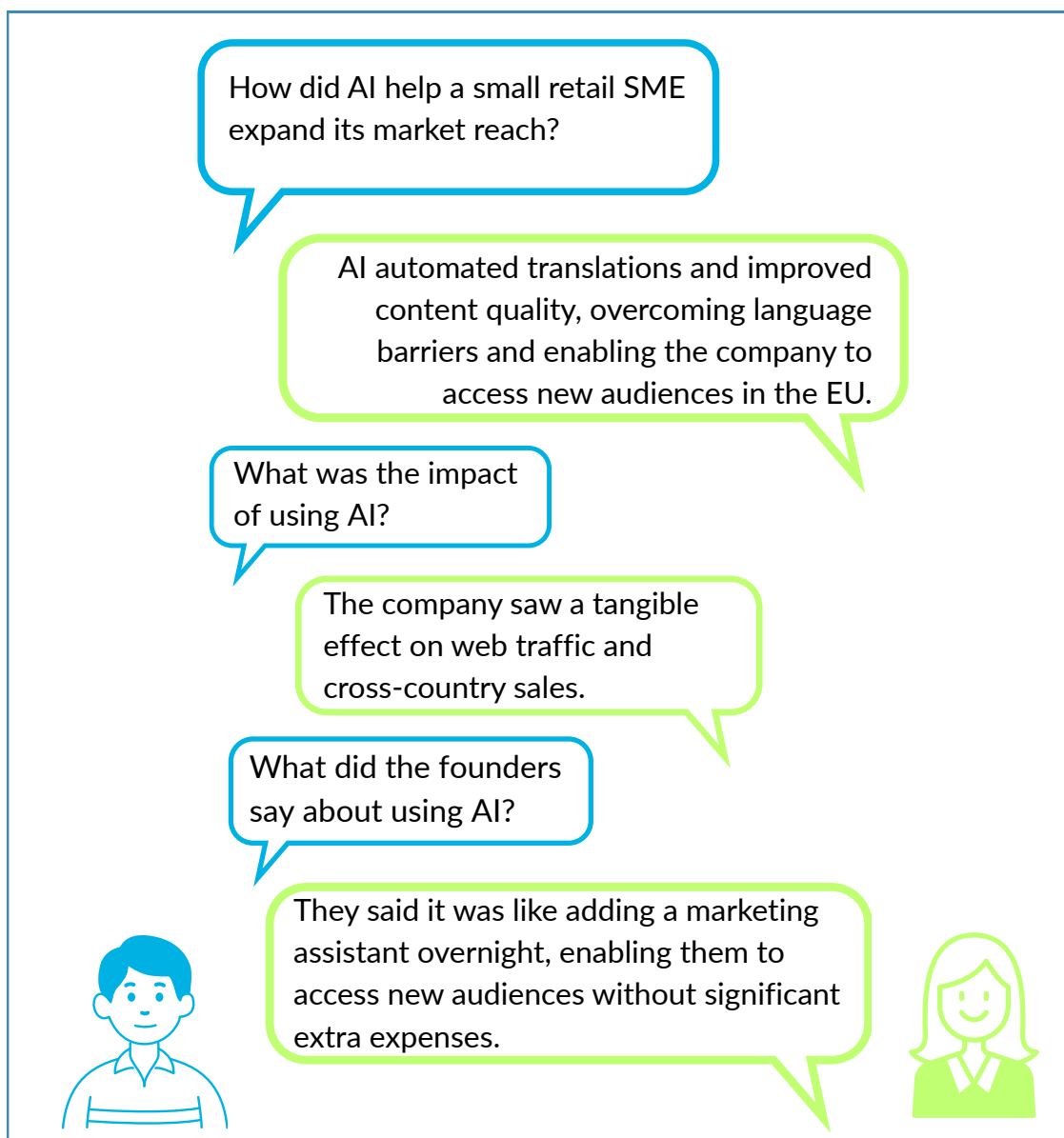

Figure 7. AI powered market expansion for retail

4. Recommendations

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The findings from both the survey and interviews show strong SME interest in AI, but also a clear set of gaps that prevent businesses from moving beyond early experimentation. SMEs consistently expressed the need for clearer guidance, practical training, accessible expertise and better-aligned regional supports. The following recommendations arise directly from the primary data and reflect what SMEs and stakeholders say is needed to accelerate adoption in the West of Ireland.

4.1 Technology: Demonstrate Practical Value

Establish regional "test-before-invest" demonstration hubs: Provide SMEs with access to short, low-risk pilot projects using their own business data, focused on measurable benefits. . These should focus on measurable benefits such as cost savings, process efficiency, and customer responsiveness. Pilot outputs should include a basic return-on-investment summary and implementation checklist.

Fund short "implementation sprints": Introduce small, fast-track grants (e.g., 4 to 8-week cycles) to move proven pilots into operational use. Address the current "missing middle" identified by both SMEs and stakeholders between experimentation and full adoption.

Create a regional repository of AI use-cases: Document and share local examples of effective AI applications across key sectors. sectors (e.g., manufacturing, healthcare, tourism). Each case should outline the business problem, solution type, time required, and cost implications.

4.2 Build Targeted Skills and Internal Capacity

Develop a two-track practical modular flexible training model: Track A (Leadership): Short sessions for owner-managers and executives on AI strategy, procurement, and ethical use. Track B (Operational): Practical, hands-on clinics for employees using the firm's own processes and tools.

Offer time-bound mentoring and coaching supports: delivered by qualified AI practitioners. The emphasis should be on identifying suitable tools, securing data, and embedding effective practices within daily operations.

Promote peer-to-peer learning: Organise short, small-group "show-and-tell" discussion and problem-solving sessions hosted by local enterprises. Prioritise open discussion and problem-solving rather than formal presentations.

4.3 Strengthen Policy, Funding, and Ecosystem Coordination

Simplify access to funding and expertise: Businesses should be referred to their local Regional Skills Manager who can signpost them to practical funded upskilling options, and the Regional Skills Fora should be used to harmonise training plans and training resources. Consider putting together specific roadmaps or resource lists of AI supports for SMEs in the region.

Establish a regional AI compliance helpdesk and toolkit: Provide clear, sector-specific guidance and practical checklists on data protection, ethical standards, and the EU AI Act. Offer practical resources such as risk assessment checklists and short compliance briefings for SMEs.

Improve coordination among regional actors: Enhance collaboration between universities, other education and training providers, digital innovation hubs, enterprise agencies, and local authorities under a shared regional AI plan. The new Regional Enterprise Plans being developed for 2026 and beyond should support alignment between the various actors on AI supports beyond training, for example by creating an AI working group under the Plan. Where possible, agencies should introduce a single-window application process for AI-related supports (training, mentoring, pilot grants).

Encourage multi-level partnerships: Facilitate placements of postgraduate or technical students within SMEs to support AI experimentation. This approach combines learning, research, and applied problem-solving while building regional talent pipelines.

4.4 Implementation and Monitoring

Pilot regional clusters: Through the Regional Enterprise Plan select one or two sectors (e.g., healthcare services, manufacturing) to test and collect baseline and follow-up data related to the proposed supports over 12 months.

Develop standard indicators for progress: Suggested metrics include: Number of SMEs engaged in AI training or mentoring; Number of pilots progressing to implementation; Reported efficiency or service improvements; Participant satisfaction and confidence levels. These could be embedded into the 2026+ Regional Enterprise Plan for ease and harmonisation of monitoring.

Report and adapt: Evaluate outcomes annually and adjust funding and delivery models based on evidence of uptake and impact.

5. Conclusion

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This study shows that SMEs in the West of Ireland view AI as a genuine opportunity to improve efficiency, reduce costs and support innovation. Many businesses are already experimenting with AI tools, but most remain unsure where and how to begin. Their challenge is not resistance but a lack of time, clarity and accessible guidance. As several interviewees noted, SMEs "see the value" but struggle to translate awareness into structured, confident adoption. The recommendations outlined in this report provide a clear path toward a more coherent and supportive regional ecosystem. They emphasise the need for targeted skills development, practical proof-of-value pilots, simplified compliance and funding mechanisms, and stronger coordination across public agencies, industry partners and educational institutions. Implementing these measures will allow SMEs to move beyond sporadic experimentation and begin integrating AI in a planned, responsible and sustainable way. Overall, the evidence demonstrates that SMEs are open and motivated to engage with AI, but require hands-on, human-centred support to do so effectively. By addressing the current gaps in skills, guidance and operational capacity, the region can ensure that AI becomes an enabler of meaningful digital transformation, strengthening productivity, competitiveness and long-term resilience across the SME base.